COUNTWAY LIBRARY
HC 4YCJ C

CHILDREN'S DIET
IN HOME AND SCHOOL

BY

LOUISE E. HOGAN

E. H. S.

26.B.42

BOSTON MEDICAL LIBRARY.

PURCHASED

BY THE

"Francis Minot" Fund.

NULLA DIES SINE LINEA

CHILDREN'S DIET

IN

HOME AND SCHOOL

WITH CLASSIFIED RECIPES AND MENUS

A REFERENCE BOOK FOR PARENTS, NURSES, TEACHERS, WOMEN'S CLUBS AND PHYSICIANS

BY

LOUISE E. HOGAN

(MRS. JOHN L. HOGAN)

EDITOR OF "THE CHILDREN'S LIBRARY," AND AUTHOR OF "HOW TO FEED CHILDREN," "A STUDY OF A CHILD," GOV. BULLETIN NO. 56 ON "THE INTRODUCTION OF DOMESTIC SCIENCE IN THE SCHOOLS OF NEW YORK CITY," "STORIES FOR CHILDREN, "THE EDUCATION AND AMUSEMENT OF CHILDREN," ETC.

REVISED EDITION

NEW YORK

DOUBLEDAY, PAGE & CO.

1910

9198 Bu

COPYRIGHT, 1910, BY
LOUISE E. HOGAN.

COPYRIGHT, 1902, BY
HENRY T. COATES & CO.

CONTENTS.

	PAGE
Reasons for a Study of the Uses of Food,	1
Milk for Infants:	
a. Nursing and Mother's Food,	9
b. Weaning and Use of Starch Foods,	13
c. Care of Milk, Bottles, etc.,	16
Foods for the Second Year,	30
Alternating Menus for Months 12, 13, 14, 15, 16, 17, 18, 19, 20 to 30,	34
Food after Thirty Months,	39
Menus from the Third to the Fifth Year,	45
Sample Menus for Children from Five to Seven who are in Average Health,	47
Menus for Children from Seven Years to Twelve,	47
Classified Breakfast, Dinner and Supper Menus,	47
Lists of Foods Forbidden by all Physicians before Second Dentition,	49
Explanatory Lists of the Various Classes of Foods,	50
Summer Diet,	52
Winter Diet,	61
Food in Illness,	67
Rules for Cases in Poisoning,	77
School Luncheons,	79
Supplementary Feeding for Feeble and Average School Children,	81
Recipes,	
Index,	

PREFACE.

A further study of the practical outcome of the subjects taken up in How to Feed Children,* and the cordial reception given that book by the medical profession, combined with the requests of parents, nurses, teachers, clubs and physicians for an inexpensive handbook that would follow out in detail the principles advanced in the larger work, lead me to offer the following book, in the hope that it may sufficiently meet the needs of those who have asked for it, and who, it would seem, realize very fully how, under conditions of health as well as in illness, they may assist and often control a child's mental, physical and moral growth through the care which depends so much upon simple, wholesome food, well-selected, well-prepared, and carefully given.

Since mothers and teachers are beginning to understand what physicians have long been advocating, namely, that in careful feeding we have an immense developing power in childhood, it is hoped that the following working-out in detail of the principles ad-

* Practical Lessons in Nursing Series, J. B. Lippincott Co.

vanced may save labor upon the part of those who are interested, and that they will welcome the relief offered them in this little handbook when they learn that all the matter offered has received the endorsement of eminent members of the medical profession, many of whom are named in connection with certain sections. It may interest them further to learn that these same authorities are ready to aid in preparing a similar handbook that will cover periods of disease, for which reason this phase of the subject has been taken up in a general way only in the present volume.

The author is greatly indebted for suggestion and guidance in the revision of this MS. to Rowland Godfrey Freeman, M.D., of New York, Professor Samuel Train Dutton, Supt. Horace Mann School, Columbia University, Edgar Dubs Shimer, Ph.D., Assoc. Supt. New York Public Schools, and also in the preparation of the earlier work, on which this book is based, to T. M. Rotch, M.D., of Boston, author of "Pediatrics," Leroy M. Yale, M.D., of New York, Medical Editor of "Babyhood," Samuel S. Adams, M.D., of Washington, and W. Gilman Thompson, M.D., of New York, author of "Practical Dietetics."

LOUISE E. HOGAN.

NEW YORK, May, 1902.

PREFACE TO REVISED EDITION

The first edition of this book, printed in 1902, has now been revised and brought up-to-date, because of the increasing demand, and an initial single order for a large edition has greatly facilitated bringing before my usual readers the matter I have so long been urged by them to send out in paragraph form, for handy reference.

In "How to Feed Children," my earlier work on this subject, a closer sequence of thought and argument was followed. In the two books may be found the complete guide needed by those for whom they have been written, but each book serves its individual purpose. "Children's Diet" takes up the more recent conclusions regarding the care of milk and its modification, methods allowable, etc., etc., and also sifts from many old theories those considered most valuable when viewed from present day requirements. In addition to this, careful attention has been given to the progress made in the school-lunch question and its possibilities; to the influence of play grounds and pure air in the home and their hygienic influence on food conditions; and to newer methods in the preparation, selection

and preservation of food, under new conditions, especially in conditions of illness.

New matter has been added describing methods for the Peptonisation of foods, by which beef, milk, cereals, etc., may be rendered soluble and readily assimilable for feeding in illness. This matter is to form part of a new book in preparation on "Diet in Disease," as mentioned in the first preface of "Children's Diet." New recipes have also been added, taken from "How to Feed Children." "Recipes for the Chafing Dish," etc., which have been adapted to the use of electrical apparatus, as well as to ordinary methods of cooking, since electricity is now so much used in both nursery and kitchen.

In the first edition of this book, older methods only of lighting and heating for nursery uses were depended upon.

The entire manuscript has received the recent critical revision of expert advisers in their separate fields, to whom credit has been given in the text.

LOUISE E. HOGAN.

NEW YORK, September, 1910.

BOSTON MEDICAL
NOV 14 1910

CHILDREN'S DIET

IN THE

HOME AND SCHOOL,

WITH

CLASSIFIED RECIPES AND MENUS.

Some Reasons for a Study of the Uses of Food.—Everyone who has the care of children finds out, through experience, that it is necessary to select the foods that are suitable for their requirements. It is now very generally believed that the old idea of giving children the same food as adults was dangerous. It has, perhaps, been too frequently the custom amongst adults to think that anything that is provided for themselves in the way of food might be given with impunity to children, forgetting that the food an adult can receive and assimilate can easily do harm to the tender organs of the child depending so largely for its development upon care in this direction. It is not only that the child's proper development may be retarded by carelessness and ignorance at this period of life, but disease is sure to follow such practices. Growth and waste and repair go on in a nearly uniform way the

whole year through, but the amount of food necessary for this work is surprisingly small. The great surgeon, Abernethy, said that one-fourth of what we eat keeps us, and the other three-fourths we keep at the peril of our lives. In winter we burn up the surplus food with a limited amount of extra exertion. In summer we get rid of it literally at some extra risk to health, and, of course, to life. We cannot burn it. Our vital furnaces are banked, and we worry the most important working-organs with the extra exertion of removing what would better never have been taken into the stomach.

Important Points to Know.—We know that a nourishing diet must be supplied for the entire season of youth, beginning with the proper care, during infancy, of the food then required. We also know that, as a child grows, we can add stronger and stronger foods, watching by-results until the time comes that it can safely take what is prepared for all. A few of the most important points to keep in mind under all conditions and through all ages are these: First, we must never forget that *through eating the child replaces waste* caused by the constant action and change going on in the organs, and that *we do not want to increase waste*, which causes illness; *hence, we must not over-feed.* Second, *if the child's digestion is normal*, and its life is an active and out-of-door one, we can give it stronger food, and more food than we would if it lived under other conditions, namely, in a warmer climate, or if leading a quiet life. Third, if a child's condition is a little below normal, or if at

all times its digestive power is not strong, we must give particular attention to the quantity supplied and the intervals of feeding. Fourth, the diet must be well balanced, which means that we must have the right proportion of the parts given for the building of the body —namely, eggs, milk, meat, etc.—the right proportion of food which gives energy and keeps it warm ; and we must also know how to supply as nearly as possible the same materials that the body is regularly losing ; as, for instance, we give heat-forming food in cold weather and liquid in hot weather. Drink constitutes food, as well as what we eat. Rules given should not be considered inflexible, to be followed implicitly, but should be suggestive. Mothers should patiently try to find out the peculiarities and food idiosyncrasies of their children, and accommodate themselves to them precisely as they do in regard to their clothing, etc. Dr. Eustace Smith says: "The successful rearing of an infant by artificial means is not a difficult matter. It requires intelligence and tact ; but, above all, it requires watchfulness. If we are vigilant to detect the first signs of discomfort, and at once modify the diet accordingly, we may be sure of preserving a healthy tone in the stomach and warding off all the accidents to which a child less carefully nurtured might possibly succumb."

Ease for Mother who Understands the Principles of Food Action.—As each class of foods serves its own peculiar purpose in the body, it can readily be seen why it is necessary for a mother to un-

derstand, or at least be advised by some one who knows, something about foods and their action. Many mothers may say that they do not cook the food their children eat; others that they do not care to, or that they do not have the time to. Probably, under certain conditions of life, this may be true and unavoidable. It is not actually necessary, however, for the mother to cook what is given to the child, to have it well-fed; she should know, however, just what to select under certain conditions, and exactly how it should be prepared, if possible. If she cannot understand so much as this, she should at least know how food should be when it is properly cooked, in order to require its proper preparation when obliged to judge by results alone. A little supervision, judiciously applied, will often prevent difficulties that are likely to occur as a result not only of carelessness upon the part of servants, but many times from lack of definite direction. Given a handbook of the necessary character, any careful servant, with a few directive words or marks from her mistress, could carry an average child safely through a day, or longer, and thus give the mother leisure for many things which, under ordinary conditions, she might be obliged to forego if at all conscientious about what is being given to her child at the nursery table.

In cases of illness, where a mother naturally feels that personal supervision is absolutely necessary, she should watch that temperament is considered and likings consulted; that the food be more daintily prepared;

that the child be fed more frequently and less at a time; that more liquid food be given—more water, perhaps, under certain conditions of weakness, the giving of which is of great importance.

Use of Water.—Anyone who has watched the average care of children will agree that it is not unusual to deprive infants almost entirely of water because they drink milk; the fact being overlooked that milk, although a liquid out of the body, becomes in the stomach a solid food. This is a common error, and one which causes many conditions of illness.

How Undigested Food Does Harm.—The sum and substance of all the study one can give to the subject is, that if the food is not such as digestion can master at the time it is useless, and can only do harm, whether for an infant or for an adult. Not being turned to proper account, the blood receives no new supply and is impoverished; the body is not nourished or developed, and inherited tendencies are given an opportunity to force their way to the front. Many diseases to which children are liable—more especially those during the school age, when young people are under the greatest pressure, owing to the craze for mental growth at the expense of physical development—would be liable to disappear under strict supervision of hygiene and diet. This is also true of the various infantile disorders, catarrhal and nervous troubles. The average mother finds more difficulty in feeding her children satisfactorily than in any other direction in home work.

This she may do in two ways: Directly, in which event she is fully aware of it, or indirectly, when she is only brought to this knowledge by *an understanding of the underlying causes of nervous, irritable, peevish and other feverish conditions, which are largely brought about by malnutrition.*

Tissue Starvation.—Those who know what tissue starvation is, understand the principles of food nutrition. Those who do not, fondly yet delusively imagine that eating means nourishing. Sometimes it does mean this; but more frequently, with children, it does not. It is not what one eats, but what one digests, that tells the story in ruddy cheeks, pink ears and lips, sound teeth, sound sleep, bright eyes, even tempers, straight limbs and active minds. What one eats and does not digest tells quite another story, namely, pale faces, sleepy eyes, fretful dispositions, flabby flesh, flat chests, sleepless nights, etc.

Want of sufficient exercise diminishes tissue change. This is what causes tissue starvation—improper food and lack of hygienic care, with lack of sufficient exercise. The subject is one of so many sides that one can only take up generalization at first, until *food-principles* have become so deeply imbedded in our minds that we can then study how to apply these principles to individual cases, which is *the chief value* of the entire study of foods and nutrition. It is not what we know about it, but what we know and do, that makes a study of value from a *practical* standpoint, and cooking should be con-

sidered a branch of practical physiological chemistry, and be duly recognized as such.

Disease Caused by Errors in Diet.—Perhaps the following words of Sir Henry Thompson, the famous English authority on Food, are truer than we think. He says: "I have come to the conclusion that more than half the disease which pertains to the middle and latter half of life is due to avoidable errors in diet; and that more mischief, in the form of actual disease, of impaired vigor and of shortened life, accrues to civilized man from erroneous habits of eating than from the habitual use of alcoholic drinks, considerable as I know that evil to be." Herbert Spencer says: "Perhaps nothing will so much hasten the time when body and mind will both be adequately cared for as a diffusion of the belief that the preservation of health is a duty. Few seem conscious that there is such a thing as physical morality. Men's habitual words and acts imply that they are at liberty to treat their bodies as they please. The fact is, all breaches of the law are physical sins. When this is generally seen, then, and perhaps not till then, will the physical training of the young receive all the attention it deserves." Froebel said, fifty years ago, "The child, the boy, the man, indeed, should know no other endeavor but to be at every stage of development wholly what this stage calls for; the earlier stage for human development and cultivation is always the more important. In its place and time each stage is equally important, but of the first (upon which future normal,

physical and mental growth depends so largely) there can be no question of its importance; hence, upon mothers rests the responsibility for the first step, for they have the first opportunity. The child's food is a matter of very great importance, not only at the time (for the child may, by its food, be made indolent or active, sluggish or mobile, dull or bright, inert or vigorous), but, indeed, for his entire life. Parents and nurses should ever remember, as underlying every precept in this direction, the general principles that simplicity and frugality in food and in other physical needs during the years of childhood enhance man's power of attaining happiness and vigor—true creativeness in every respect. If parents would consider that not only much individual and personal happiness, but even much domestic happiness and general prosperity, depend on this, how very differently they would act; but here the foolish mother, there the childish father, is to blame. We see them give their children all kinds of poison, and in every form, coarse and fine." If one may judge from expressions such as these, there would seem to be a reproach cast upon those who are responsible for the proper care of children. Let us see to it, then, as mothers and caretakers of children, that it is not resting at our doors.

Nursing and Mother's Food.

Ideal Conditions for Nursing.—A large number of infants are deprived unnecessarily of their natural food. As knowledge increases, this will undoubtedly occur less frequently. To nurse a child normally, a mother should be strong and healthy; have an even, happy temperament; be desirous of nursing her infant, and able to devote herself to this special duty. She should be willing to regulate her diet, her exercise and her sleep, according to rules laid down by physicians. These may be said to be ideal conditions. Many women, however, who are far from vigorous, may nurse their infants with good result. One point to remember is, that the temperament must be controlled. Detail affairs in life must not be allowed to hurry anything touching the infant. Periods of rest must be regular, and diet should be such as will keep the body at the highest possible point of normal health.

Exercise for Nursing Mother.—Exercise should be constant and sufficient. It has been shown that a case of convulsions in a child was controlled by the return to a daily walk of a mother who gave up her habitual exercise because of wearing a tight pair of shoes. Her physician discovered, by the results in the child, that she was neglecting her daily exercise, and a close examination of the mother's actions brought forth an unwilling confession that she had not taken her usual walk because

of this reason. Had she known the principles underlying food-action, she might have reasoned out for herself that, because of lack of exercise, the milk she was feeding to her infant was becoming too concentrated and needed more water, and she could have given the child a drink of water before nursing it, which would have corrected the evil. This is one instance, only, to show a thinking mother why it is worth while occasionally to understand the principles of things in order that she may help herself, when, under other conditions, she might have to call a physician, or perhaps cause her child to suffer.

Reasons for Not Nursing.—It is of great importance that mothers who are suffering from some chronic disease, or one which their infants may directly inherit, should give up all thought of nursing their children.

Nursing Diet for Mother.—Taking it for granted that a child is being nursed, under whatever condition of life for the mother, the following points are to be remembered: The mother's diet should not include too much meat and solid food; an abundant light diet should be given at first, such as milk gruels, soups, vegetables, bread and butter, and, after the first week, a small amount of meat once a day; increased diet as the exercise increases, using plain but nutritious foods, taking regular meals, and sometimes using, between mealtimes, coffee, hot milk, or cocoa.

Use no stimulants.

Malt extracts are useful, and milk taken at night is to be advocated.

Idiosyncrasies are to be looked for, and if certain articles disagree with certain women, and, consequently, with their children, they should be omitted ; but they need not be forbidden to all women on that account. Dr. Rotch says that an average woman should use a plain, mixed diet, with a moderate excess of fluids and proteids over what she is normally accustomed to.

How to Feed an Infant the First Two or Three Days.—If, during the first two or three days of the life of the infant, it is restless, and evidently hungry, on account of the mother's inability to supply milk, one or two drams of a five-per-cent. milk-sugar solution, made by dissolving milk-sugar in sterilized water, should be given at intervals of two or three hours. If the mother's milk is delayed still longer, it will be necessary to depend upon the physician, who should specify exactly what is to be given.

Intervals for Nursing.—The intervals constitute a very important part in infant feeding. Dr. Rotch gives the following table :

Age.	Intervals.	Number of Feedings in 24 Hours.	Number of Night Feedings.
From birth to 4 weeks,	2 hours	10	1
From 4 to 6 weeks,	2 hours	9	1
From 6 to 8 weeks,	2½ hours	8	1
From 2 to 4 months,	2½ hours	7	0
From 4 to 10 months,	3 hours	6	0
From 10 to 12 months,	3 hours	5	0

Night Feeding.—Note that night feedings are omitted at two to four months. The mother may thus have continuous sleep at night. The regularity of proper intervals in the feeding of infants influences greatly the comfort alike of mother and child. Dr. Freeman allows two night feedings from birth to 4 weeks, and makes interval 4 hours, instead of 3, from 10 to 12 months.

Too frequent nursing renders milk too solid, lessens the water, and gives the child colic. Too long intervals makes the milk too watery, and fails to give it its necessary nutrition.

Weight and Nutrition.—Increase of weight is the best evidence as to nutrition. Dr. Edward T. Davis says: "A child may gain, by proper food, from a half ounce to an ounce daily for the first four or five months, and half the amount for the rest of the year. If at any time the child does not gain in weight, and the mother's milk seems insufficient, it would be proper to add to the breast-feedings a properly prepared milk made up according to the formula of a reputable physician. If teething is delayed, it is an evidence of poor feeding."

Growth.—The well-nourished child should grow about eight inches the first year, or nearly three-fourths of an inch every month, and four inches the second year—not quite half an inch a month. An infant should double its weight in five months and treble it in the year. It should be weighed and measured monthly.

If it does not increase at the rate of about a pound a month the first year, and about twelve ounces a month the second, in all probability its food will be found at fault.

Weaning.—Under all circumstances, even if a mother is healthy and the milk is good, the child should have been weaned by the end of the first year, often at the seventh to eighth month. It should usually be taking by this time plain cow's milk, with a starchy food of some kind. When a child has six or eight incisor teeth it is usually supposed to be able to digest starchy food. Some physicians advocate the use of starchy foods much earlier than others; but it depends very largely upon the condition of the child and the preparation of the starchy food. All these matters may be regulated by carefully watching the child's development from week to week in weight, general condition, restlessness, etc. It is always preferable to wean the child in cool weather, and when it is not cutting teeth. It should never be weaned suddenly.

Method for Substituting Bottle Food.—The food substituted should be given very gradually. Whatever preparation is used should be given first at but one feeding a day, nursing at the other usual hours, until the child shows that there has been no disturbance from this slight change. This may require from two to three days. Taking it for granted that there has been no disturbance during this time with the use of one bottle of prepared milk, it will be safe to introduce another,

not at the hour for feeding which is directly after the hour when the first bottle was used, but at an hour dividing the bottle feedings evenly throughout the day by giving one in the morning and one in the evening. Many mothers who have given attention to this subject in a careful way have learned that by giving the first bottle in the evening they themselves can secure the rest they often need, and that the child is quiet throughout the night because it has had a comfortable meal. It is possible to absolutely control the condition of milk that is thus given ; and as it may not always be possible for a woman to control her whole day when she is nursing her child, her own tired condition at the end of the day may be the cause for a fitful, restless night upon the part of the child, the last feeding of the child having been a disturbed one. It is well known to physicians that an emotional mother or an overtired nursing mother will frequently have a crying child at night. This can usually be avoided as soon as supplementary feeding is begun ; hence it is always best to begin any change by giving the first bottle at night time. The milk must have been cared for sufficiently to keep it absolutely sweet throughout the day.

Use Fairchild's Peptogenic Milk Powder for weaning if you have no physician to advise you.

If two bottle feedings a day, replacing two nursings, are found to agree with the child, then three may be used, and so on, until every meal is being given from the bottle.

Changing from Prepared Milk to Plain Cow's Milk.—Should this milk feeding for weaning be prepared according to a physician's prescription, the change must even then be made from the modified milk to plain cow's milk just as gradually as the change has been made from nursing to the modified milk; that is, one bottle of modified milk should be replaced with the plain milk, and, upon finding it agreeing, two bottles daily should be used and so on.

Home Preparation of Starch Foods for Infants.—Careful preparation necessary. One point to be emphasized in substitute feeding is that an artificial food must always be so prepared that it may be safely used at any time it may be needed. The first starch foods to be used are usually preparations of barley and oatmeal, selected by or made according to the formulæ of a reputable physician.

Starch foods imperfectly cooked undergo fermentation; hence such formulæ call for long cooking.

For Dr. Rotch's recipe for **Oat Jelly,** to be used in the first year, see page 117.

For **Malted Gruel,** see page 115.

For **Oatmeal Gruel,** see page 113.

For **Oatmeal and Graham Flour Gruel,** see page 113.

For **Barley Gruel,** see page 114.

For **Farina Gruel,** see page 114.

For **Arrowroot Gruel,** see page 115.

Great Care of Milk and Bottles necessary.—Comparatively few people stop to consider how very quickly dangerous changes take place in milk, and how readily it becomes contaminated. The carelessness so frequently shown by milkmen, maids and nurses plays an important part in infant mortality.

Requirements for Pure Milk.—It is generally conceded, to-day, as the result of much investigation upon the part of philanthropists, scientists and physicians, that it is imperative that the cows supplying the milk receive the care required to supply as pure and clean a milk as it is possible to procure; that the milk be properly handled and cared for, and be kept cold; that the cream be separated from the milk by a separator especially adapted for the purpose; that all the ingredients used in modifying milk be perfectly sterile; and that everything that can possibly touch the food of a child be clean, sweet and wholesome. When this can be depended upon wherever a child's food is to be found, we will begin to see the spreading of its influence in a marked degree upon the health of the children of not only the poor in large cities, who have now to struggle as best they can against sour milk, heat, dust, and tenement life, and all the evils and discomforts that attend the very poor, but upon many children in all classes of life who to-day give evidence, from the richest to the poorest, of not only lack of cleanliness, sweetness and wholesomeness in their food, but of great and culpable carelessness.

What is a Good Food for Baby.—Dr. Jacobi says, "A good food for the baby does not mean one which simply doesn't kill; it is one which permits a child to grow up healthy and strong."

Early Bottle Feeding and Weaning.—Mother's milk is actually the ideal food for children, but very frequently cow's milk must be substituted. Milk prepared with Fairchild's Peptogenic Milk Powder may be used as a substitute without fear during the entire period of early bottle feeding and weaning. Chemical analyses and clinical reports have shown that milk prepared in this manner is a safe substitute and its efficacy is unquestioned. The milk is modified by Fairchild to such an extent that the cheese in the cow's milk is adapted to an infant's digestion. It provides a means of making, in the household, from cow's milk, water and cream, a "mother's milk" based originally upon the idea that cow's milk was made for calves and not for babes, and that it was very evident that certain crude, marked and well known differences of cow's milk from human milk required modification to make it fit for a human infant. An actual study was made by Fairchild of cow's and of human milk, and by certain definite, stated methods the former was brought to closely resemble human milk. This "humanized" milk is not to be considered as only a food for a sick infant, or for feeble infants, nor a

milk to be used as a last resort after trying all other methods brought before us, but as a food which may be *safely* used whenever a substitute food is required, and throughout the entire period of milk feeding, if it seems advisable to those in close touch with the child. People who use it only for sick babies do not know its real value in normal conditions. It is of importance that careful investigation should govern any phase of feeding. In this way snap shot judgments may be avoided. In this process of adaptation of cow's milk to the normal requirements of an infant, there is no necessity for the addition of anything to the milk except the required proportion of cream and water, according to the directions given with the powder. The process yields a milk which Professor Leeds, of Stevens Institute, called "humanized milk," which in taste, physical characteristics and chemical constitution approaches very closely to woman's milk.

Dr. Russell H. Chittenden, Director of Sheffield Scientific School, Yale University, says "the resemblance of milk modified by the Peptogenic Milk Powder to the infant's natural supply is a very striking one." Certainly science need go no further in its search for a suitable food for an infant deprived of its natural supply than to provide a substitute which is recognized as one resembling nature by

those who are supposed to know, hence mothers who wish to follow nature's laws have here an opportunity to do so. There are many other methods advocated for the modification of milk, but they, one and all, require more care and exercise of knowledge than the average mother is likely to be able to give to the subject, hence they will not be mentioned here but may be left to the attending physician, to whom, very often, the above mentioned process is a great relief and reliance, as it should also be to the mother and nurse to whom these remarks are specifically addressed, since they have most to do with the question if a physician is not to be had.

The Peptogenic Powder Cold Process is a method used very frequently for children who have passed the nursing period. It is to be recommended when it is desired to give a raw food.

Directions.—Put one measure of peptogenic milk powder into a clean quart bottle, add one-half pint of cold water, one-half pint fresh cold milk, and four tablespoonfuls of sweet, fresh cream. Shake the mixture well and place *directly on ice.* When feeding is required shake the bottle, pour out the portion and heat carefully until it is quite warm enough to take. A day's supply may be made at one time as it will keep perfectly for twenty-four hours in a well-corked bottle directly on ice.

Milk Prepared with Peptogenic Milk Powder as a Food for Occasions.—While milk prepared with Peptogenic Milk Powder is by special design a food for the nursing infant, it has proved of service also in the feeding of older children, and even adults, during temporary derangements of digestion, or when gastro-intestinal disorders threaten.

This food is used with every satisfaction after severe summer diarrhœal attacks, and under similar conditions, when it is desired to present milk in a form that will not tax digestion, with a view to restoring nutrition and normal digestive power.

It was used in this way in the General Hospital at Montauk after the Spanish War, and forty gallons a day were prepared and used with excellent results in cases of exhaustion and of typhoid fever. The ease of preparation in camp was a great feature in its favor, as it is in the home.

A useful little "red letter" circular of four pages gives in a brief form all the directions necessary in both ordinary and unusual cases. A small book called "Schedule and Suggestions" deals with the practical details of preparing and using the food, giving a schedule for the nursing period and notes on the later feeding.

A busy nurse, mother or physician will find these booklets of much service, and they may be readily secured through any druggist or physician.

Care of Nipples.—The care of bottles, nipples, etc., is naturally an important part in infants' feeding. Smooth, seamless nipples are preferable to those which are seamed, as they are easily cleaned, and do not collapse. When cleaned and dried they should be kept in a covered box or dish, or wrapped up in a clean napkin, and just before using one it should be dipped in boiling water. This latter point must not be omitted. The usual plan is to keep them in a tumbler of water containing soda, which is rarely satisfactory. Experience has shown the above plan to be the preferable one.

Care of Bottles.—Milk-bottles can be thoroughly cleaned by rinsing first with cold water, then washing with hot soapsuds and a bottle-brush that is clean. The brush requires as much care as the bottles, a fact that is sometimes overlooked. Rinse the bottles, both inside and out, in an abundance of flowing clean water, preferably under the cold-water faucet, and examine each bottle carefully to see that there is no cloudiness or speck of milk remaining. They may then be placed in the rack and set in a moderately hot oven for an hour, when they will be sterile and ready for use. They may also be put over a fire in a boiler filled with cold water, to boil for half an hour, when they should be carefully drained and kept free from dust. Experiment will show that the oven method is preferable, as the

bottles are dry and ready to be put away when removed from the oven. Care should be taken to cool the oven slightly by opening the door a few minutes before removing the hot bottles. This will prevent the cracking that might result upon sudden exposure to the colder air of the room.

Care of Unwashed Empty Bottles.—After an infant has been fed, the empty or half-empty bottle of milk should not be allowed to stand for any length of time. It should be emptied directly, or as soon as possible, and be rinsed with cold water. It may then await a convenient time for washing the entire number used that day. A careful nursery-maid will, however, wash and heat the bottles as fast as they are emptied, which is decidedly the best plan. Physicians and fathers know, if no one else does, how frequently the presence of a baby in the house insures the appearance at all times and in all places of half-empty or unclean-looking milk-bottles, which undoubtedly cause much of the illness usually ascribed either to the visitation of Providence or to a supposedly impure supply of milk. Careful observation will convince many that *not one cause alone* is the source of evils met with constantly in infant feeding.

Intervals.—The intervals in substitute feeding must be carefully considered. Dr. Rotch's table for intervals in breast-feeding applies equally to substitute feeding. His table for amounts is as follows :

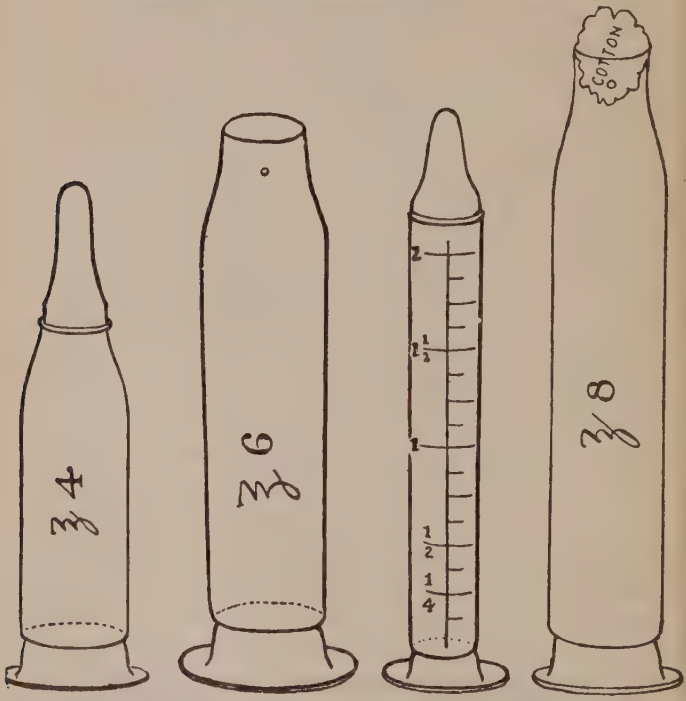
GENERAL RULES FOR FEEDING DURING THE FIRST YEAR.

The day feedings are supposed to begin with the 6 A.M. feeding and to end with the 10 P.M. feeding.

Age.	Intervals, Hours.	Number of Feedings in 24 Hours.	Number of Night Feedings.	Amount at each Feeding.		Total Amount in 24 Hours.	
				C. C.	Oz.	C. C.	Oz.
1 week	2	10	1	30	1	300	10
2 weeks	2	10	1	45	1½	450	15
4 weeks	2	9	1	75	2½	675	22½
6 weeks	2½	8	1	90	3	720	24
8 weeks	2½	8	0	100	3¼	840	28
3 months	2½	7	0	120	4	840	28
4 months	2½	7	0	135	4½	945	31½
5 months	3	6	0	165	5½	990	33
6 months	3	6	0	175	5¾	1035	34½
7 months	3	6	0	190	6¼	1125	37½
8 months	3	6	0	210	7	1260	42
9 months	3	6	0	210	7	1260	42
10 months	3	5	0	255	8½	1275	42½
11 months	3	5	0	265	8¾	1312	43¼
12 months	3	5	0	270	9	1350	45

The above table is given as a safe average to begin with. Dr. Rotch says it is so important to avoid stretching an organ so easily distensible as the stomach that it is wiser to give too little rather than too much food in the early days of life. An unusually heavy child might require a little more; for instance, a child weighing ten pounds at birth would, according to tables regulated by weight, require 1½ ounces instead of 1 ounce at a feeding, if in a healthy condition; but this the attending physician should determine. He advises the use of a set of graduated feeding-tubes during the more important periods of growth, for the purpose of continu-

ally impressing upon the mother and nurse what the physician often has the opportunity of telling them only at the beginning of the nursing period,—namely, that



the error is in giving too much food rather than too little. This error naturally results when, as is commonly the case, the usual eight-ounce nursing-bottle is used at the very beginning of infantile life.

He says that he has found that he can easily convince most mothers of the mistaken zeal of nurses who advocate giving the young infant large amounts of food, by showing them the size of the infant's stomach at birth, and comparing a small tube which corresponds to the stomach's capacity with an eight-ounce nursing-bottle.

Why Milk Is Pasteurized.—It is not generally known by mothers that every year, in the United States alone, many thousands of children die for want of care in the selection, preparation and administration of their food. Every year more attention is being given to securing a pure milk supply, but so far with indifferent results so far as the masses are concerned. Under conditions that are not sanitary, so often found in dairies and in transportation, milk quickly becomes dangerous as a food. It often becomes a source of contagion also from careless handling where infection exists. In such cases pasteurization, if properly applied, is a very good guard against infection. When conditions become such that we may depend upon rigid inspection by State inspectors, pasteurization will become unnecessary except in special cases. Even at present it is advised as a safeguard only, and when unclean, infected or uncertified milk is the only milk available. A mother may use this method of protection in her home, at the time or shortly before the milk is to be

used, for reasons given elsewhere, but she must not overlook the fact that she is also adding dangers of another character by doing so, which must be met by providing nutrients that will replace the loss entailed by this process—as has been shown by careful study of this question. It is not one for her to decide for herself, but one to be taken up with a physician who has advanced sufficiently in this study to have become an undoubted authority.

The various devices offered for the application of an exact degree of heat to milk are well known. The one designed by Rowland Godfrey Freeman, M.D., the eminent specialist, is made so that a thermometer need not be used. Every household possesses the means of pasteurizing milk at the moment they use it, by bringing it to the proper temperature by scalding it in a double boiler, or in some way using ordinary kitchen utensils, to reach this temperature approximately.

Milk which has simply been pasteurized in order to keep it sweet and then set aside for future use, may soon become worse than raw milk, therefore it should be done, if done at all, *when the milk* is used, or very shortly before that time, because if the food is taken soon after pasteurization has taken place the dangerous spores will not have had an opportunity to develop—and the purpose of pasteurization, namely, killing infection, will have been met.

Menus.

Cereals.—Cereals are a necessary food for growing children. They promote fine muscular development. Starch being the predominant constituent, it is evident that great care must be exercised in cooking the various grains allowable in the nursery, remembering also that long cooking increases digestibility. It is important to know what you want to accomplish when cooking cereals. All starchy foods should be cooked long enough to be put in a condition to be easily acted upon by the digestive juices. The purpose in preparing them is to secure the bursting of the granules and the liberation of the starch by the highest temperature it is possible to reach, that it may be acted upon by the heat and be partially changed into a substance called dextrine, which is easily digested. An extremely high and prolonged temperature is required for this change, without which cereals are not nutritious, and are likely to cause digestive troubles.

Need of Varied Menus.—One of the greatest difficulties experienced in feeding during nursery and school age is in the provision of sufficiently varied menus. Constant repetition of any food causes indifference, no matter how much it may have been enjoyed at first. The illustrative menus given in the latter part of this book are suggestive only, and they may be interchanged to suit the general house supply, vegetables

being used according to season, and care being given to combinations, as, for instance, the use of but one starch food in a menu, etc. One food of each class is usually sufficient to constitute a satisfactory meal.

Quantities to Allow. — It will be noticed that quantities are mentioned at times when certain foods are to be limited at each meal, leaving the others to be taken according to the appetite of each child. If a child is accustomed to regular, simple meals, its appetite may be trusted to regulate amounts. If, on the contrary, it has been fed "a little of everything," and has been allowed to eat candy, etc., between meals, this point must be carefully considered, and an effort must be made to bring back the child to simple tastes and regular habits, by omitting the foods forbidden for children and by giving no food between meals. The amounts indicated should vary in accordance with the age, weight, and condition of the child. It is evident that an active child needs more than one who is passive. The safest rule to follow is to give, so far as possible, a single representative of each class of food at each meal; to give little meat and sugar, and to complete the quantity required for each meal with broths, starchy vegetables, and either green vegetables or else fruits. When constructing a menu for a child, keep constantly in view the proportions required of the various classes of foods.

All the dishes indicated in the following menus may be easily prepared by any one understanding the principles of cooking, if care be given to the dainty prepa-

ration of the articles called for, and if scrupulous cleanliness (one of the most important factors in nursery cooking) be observed.

If we want our children to be strong, we must use animal food as an important part of their diet, in the form of milk, eggs, and meat soup for younger children, and in that of eggs, fresh meats, etc., for those who are older. In selecting menus, macaroni and spaghetti should be more relied upon for variety than is usual after a child is five years old.

Dr. Thompson's General Rules for Feeding Young Children, given in "Practical Dietetics," are concise and comprehensive, as may be seen from the following:

1. Allow time for meals.
2. See that the food is thoroughly masticated.
3. Do not allow nibbling between meals.
4. Do not tempt the child with the sight of rich and indigestible foods.
5. Do not force the child to eat against its will, but examine the mouth, which may be sore from erupting teeth, and examine the food, which may not be properly cooked or flavored. If good food is refused from peevishness merely, remove it, and do not offer it again before the next meal-time.
6. In acute illness, reduce and dilute the food at once.
7. In very hot weather, give about one-fourth or one-third less food, and offer more water.

Dr. Rotch's Suggestions for Feeding a Twelve Months Old Child. (From "How to Feed Children.")—Between the twelfth and thirteenth months, Dr. Rotch is in the habit of giving the infant five meals during the day. At this time it is well to accustom it to take its food from a spoon, and as soon as possible to omit feeding from the bottle. The five meals should be arranged in the following manner:

"For breakfast, bread and cow's milk, slightly warmed.

"For lunch, equal parts of oat jelly and cow's milk, warmed, with a little salt added, according to the infant's taste.

"This meal of oat jelly should be repeated in the middle of the afternoon.

"In the middle of the day, broth of some kind, either chicken or mutton, carefully prepared so as to be free from fat on its surface, can be given with some bread.

"The fifth meal should be given in the latter part of the afternoon, and should consist of bread and milk.

"In some cases it is impossible to make infants swallow bread for a long period after the usual time of twelve to thirteen months. At times it is not until they are two and one-half to three years old that they can be induced to take bread. In these cases we must feed them according to our judgment of the individual case.

"When the infant is fourteen to fifteen months old,

some thoroughly boiled rice can be added to the broth in the middle of the day, and if it digests this well it can also have bread given with this meal.

"When the infant is sixteen months old, it can have a small amount of butter on its bread. When it is seventeen to eighteen months old, it can have a thoroughly baked white potato, mixed with butter and salt, added to its mid-day meal of broth. When it is nineteen to twenty months old, eggs can become part of its diet.

"There are not many fruits which should be given to the infant in its second year. A baked apple can be given at the evening meal when the infant is fourteen to fifteen months old; or, for variety, the apple can be made into a simple sauce, never, however, having the sauce made with much sugar. When peaches are in season, a ripe peach can often be given with benefit, especially if the infant is inclined to be constipated. Other fruits should be avoided, as they are not necessary for the infant's nutrition, and at times produce serious trouble."

Classification of Menus.

The following menus are constructed upon this base, suggested by Dr. Rotch, and explanatory notes are introduced where it seems advisable. The hours for the five meals from twelve months may be arranged, as most convenient for the average household, as follows:

Twelve to Thirteen Months.

7 A.M. Early breakfast—a breakfast-cupful or a six-ounce bottle of warm milk; a piece of bread or a cracker.

9.30 A.M. Breakfast proper—two tablespoonfuls of oat jelly with the same quantity of milk, seasoned with a little salt.

12.30. Dinner—a cup of chicken broth with stale bread-crumbs; one tablespoonful of gelatin, flavored with orange juice.

3.30 P.M. Repeat meal given at 9.30.

6.30 P.M. Supper—one-day-old bread broken in warm milk (six ounces).

Supper at half-past six gives time for the child to have a few minutes' rest before going to sleep at seven. The child should be dressed for the night before receiving this meal, that unnecessary handling upon a full stomach may be avoided. Half-past six is the time frequently advised for the first meal in the morning, but, by judicious training as to sleep, seven o'clock will be found early enough, and if the habit of sleep is once fixed a child will not wake before this time, thus giving many mothers without nurses the opportunity for sparing their strength a little in the early morning.

First Morning Meal from the Bottle.—It is also of great assistance under some circumstances to give the first meal from the bottle for a longer period than twelve months, as at this early hour much carelessness may be expected from ordinary servants in the handling

of baby's food, and unless there is a reliable nurse the mother must usually rise very much earlier than is necessary for other demands. The plan of having a bottle ready for warming at seven o'clock in the morning will obviate many sources of trouble that are usually met with, and, while not the ideal plan, it is practically much better than to allow servants an opportunity for careless handling of baby's first meal for the day, which may readily change the tenor of that entire day's atmosphere.

A Convenient Daily Routine. — Breakfast at 9.30 for baby gives the mother time to take her own comfortably, to bathe her child at nine, and feed it at half-past, after which it should sleep an hour or more, and then be taken out for a while before dinner at 12.30. It may be taken out for an hour again after dinner, from which time it will be likely to sleep until its next meal at half-past three. From this time it should be kept awake until it is ready to be put to sleep for the night at seven, after being undressed and fed at half-past six. Dr. Samuel Adams, of Washington, says: "A young infant has nothing to do but eat and sleep. As soon as he is fed he will take a nap, and will probably sleep for an hour and a half. After the first year the naps become shorter and less frequent. During the second year a nap in the morning after breakfast, and one in the afternoon about one or two o'clock for an hour or an hour and a half, are usually sufficient, and these naps should be insisted upon for the rest of his mind and body and to enhance his growth

and health. As the child attains the third year he can usually drop the morning nap. The afternoon one should be insisted upon very soon after the child has his noonday meal, in winter as well as in summer.'' Some physicians advise a night feeding at ten or eleven, to be given until eighteen months. If so, the food may be given from a bottle without disturbing the child's sleep by keeping to the same hour exactly and gently touching the lips of the child with the tip, lifting the pillow carefully at the same time. A child who is well is usually so sleepy that it will take the milk very readily without opening its eyes. At this time any necessary changes for the night may also be made, to avoid further chance of disturbance. Regularity in this method is certain to bring eventual success. If, during this early period of feeding, great care is given to the little points that appear to many to be trifling at the time, a fixed habit of sound sleep from seven to seven may be formed that will prove one of the greatest blessings conferred upon a child by a wise mother.

Alternating Menu for the Same Period—i.e., Twelve to Thirteen Months.

7 A.M. Six-ounce bottle of warm milk, with a piece of crust from French bread or a biscuit.

9.30 A.M. One small cup of fresh sweet milk (heated to 167° F.). Two tablespoonfuls of well-cooked oatmeal gruel served with two tablespoonfuls of fresh cream, also heated.

12.30 P.M. One-half pint of mutton broth with stale bread-crumbs. Two tablespoonfuls of junket, made with Fairchild's essence of pepsin.

3.30 P.M. A breakfast-cupful or an eight-ounce bottle of milk and gelatin. Dissolve a teaspoonful of gelatin in a little of the cold milk, and add to the remainder when it is warm, taking care to keep the mixture well covered when dissolving.

6.30 P.M. A breakfast-cupful of warm milk and a piece of bread or a biscuit, or, if the bottle is still used, a six-ounce bottle of warm milk, with bread or biscuit.

Fourteen to Fifteen Months.

7 A.M. One slice of bread and eight ounces of milk, given in cup or bottle.

9.30 A.M. One cup of barley jelly and milk, half and half, salted.

12.30 P.M. One slice of bread, one-half pint of chicken broth, with a tablespoonful of well-boiled rice added.

3.30 P.M. Repeat meal given at 9.30.

6.30 P.M. Eight ounces of warm milk and a Graham biscuit.

Alternating Menu for the Same Period,—i.e., Fourteen to Fifteen Months.

7 A.M. Bread and milk (eight ounces).

9.30 A.M. One tablespoonful of gluten porridge served with top milk.

12.30 P.M. One cup of chicken jelly made with milk. A piece of crust of bread.

3.30 P.M. One cup of oat jelly and top milk, half and half, as directed before.

6.30 P.M. Six ounces of milk, the soft part of a baked apple, a biscuit, or a piece of zwieback.

At sixteen months add a little good butter to the bread given. (Rotch.)

After the fifteenth month two to six teaspoonfuls of orange juice may be given, or a baked or stewed apple.

Seventeen to Eighteen Months.

7 A.M. One piece of bread and butter and a cup of milk.

9.30 A.M. One cup of oat jelly and top milk, half and half.

12.30 P.M. One cup of chicken broth, bread and butter, and a baked potato mixed with a little butter and salt. A tablespoonful of juice from a sweet orange.

3.30 P.M. One piece of zwieback and a cup of sweet milk.

6.30 P.M. Eight ounces of milk and bread and butter.

Alternating Menu from Seventeen to Eighteen Months.

7 A.M. Graham bread and butter and a cup of warm milk.

9.30 A.M. One tablespoonful of well-cooked wheatena served with a few tablespoonfuls of sweet cream, taken from morning's milk and heated to 167° F. One piece of bread-crust or zwieback.

12.30 P.M. One-half pint of mutton broth, two tablespoonfuls of boiled rice. Bread and butter.

3.30 P.M. One cup of milk jelly and a biscuit.

6.30 P.M. Two Graham biscuit, or bread, if preferred, broken into eight ounces of warm milk.

Nineteen to Twenty Months.

7 A.M. A cup of milk and bread and butter.

9.30 A.M. Two tablespoonfuls of wheat porridge with cream, a small glass of milk, bread and butter, one tablespoonful of clarified apple (page 153).

12.30 P.M. A milky, soft-boiled egg (page 128) with stale bread-crumbs, bread and butter, one tablespoonful of boiled rice, one or two tablespoonfuls of fruit gelatin (page 162).

3.30 P.M. A saucer of junket, bread and butter.

6.30 P.M. Two pieces of toasted bread broken into four ounces of hot salted milk; a glass of milk to drink.

Alternating Menu from Nineteen to Twenty Months.

7 A.M. Bread, butter, and milk.

9.30 A.M. Two tablespoonfuls of breakfast hominy with salt and cream, a glass of milk, bread and butter.

A pared ripe peach, if in season, or a tablespoonful of scraped ripe apple.

12.30 P.M. One cup of beef broth, with crumbs of zwieback broken in it, a baked potato, two tablespoonfuls of tapioca (page 54).

3.30 P.M. A saucer of oatmeal jelly (page 117) with a little salt and cream.

6.30 P.M. Bread and milk.

From Twenty to Thirty Months.

From twenty to thirty months use the foods indicated so far, varying the menus by interchanging with any similar articles, the recipes for which are given elsewhere.

This is a sufficient diet for this period, and it is worse than folly for mothers to attempt at this early age, as is frequently done, to accustom their children to the use of everything and anything from the general table. There are many persons, again, who will follow a cautious course in nursery feeding to a certain point, and then undo all by a fitful lapse into carelessness. The remarks made in this connection should be emphasized if the infant's digestion and general nutrition are to be considered, and the parents should insist that no other articles of food be employed except such as are similar to those spoken of, according to the taste, judgment, and knowledge of cooking which exists in the special household.

Food After Thirty Months.

"At this time it will be well to begin to accustom the child's digestive functions to a still greater variety of food. In summer, the more easily digestible vegetables, such as squash, young peas, and young beans, can be given. The variety of fruits can also be increased at this period, but they should be cooked. The principal change which is to be made in the diet to which the infant has been accustomed is a very decided increase in the proportion of the proteid element of its food. This is accomplished by means of giving the child meat. The quantity of meat which should be given towards the end of the third year should be small at first, and should be given at intervals of a day or two. Meat as a regular article of diet for each day is not, as a rule, required until the child is between three and four years old. The kinds of meat which should be given in this early period of childhood are chicken, mutton-chop, roast beef, and beefsteak. These meats should be cut into small pieces, and a little salt added, according to the child's taste. It is well, during the latter part of the third year and the first part of the fourth year, to give the child an egg on one day and meat on the next.

"When the child has reached the age of five or six years, we should allow it to have a somewhat more varied diet, but during the whole period of childhood the closest attention should be given to the regulation of the kind and the amount of food to be given, and

any deviations from the rules just laid down are to be deprecated.

"It should be particularly noted that meat is not given until after thirty months,—and eggs are withheld until the child is nineteen or twenty months old."—From "How to Feed Children."

Dinner Menus Allowable After Thirty Months.

Beef broth with vermicelli; bran or whole-meal bread, and the best butter obtainable; lightly broiled lamb-chop, scraped and seasoned with salt; spinach boiled tender and mashed through a purée sieve, served plain with cream or in broth; baked potato with salt; orange tapioca for dessert, and a fruit juice made as directed, and used as a drink.

1. Chicken broth with rice; minced broiled tenderloin steak with salt (no butter); boiled rice; brown bread with butter; asparagus tips or stewed celery, with hot cream as sauce; cup custard for dessert.

2. Mutton broth; the white meat of chicken cut into very small pieces; baked potato; spinach; bread and butter; orange float for dessert.

3. Beef tea; stewed squab; boiled or steamed rice; bread and butter; Bermuda onions, stewed very soft in milk; junket with egg for dessert.

4. Milk soup; roast beef rare and minced; boiled rice with dish gravy from roast beef; spinach or stewed celery; bread and butter; cup custard for dessert.

5. Strained vegetable soup; scraped broiled mutton-

chop, rejecting all fat; baked potato; apple sauce; bread and butter; junket, made with Fairchild's essence of pepsin, for dessert.

6. Beef broth; boiled or broiled fish; boiled spaghetti with milk; boiled asparagus tips; gelatin with whipped cream for dessert.

A Week's Menus for a Child of Five Years.

With but few exceptions (tomatoes, bacon, and figs), the following articles mentioned may be used for children from two and a half years up, but the amounts given will be found to be more than is required for that age, as they are sufficient for a hungry child of five.

SUNDAY.

Breakfast.—One ripe apple, pared, quartered, and carefully cored. Two or three tablespoonfuls of well-cooked and well selected oatmeal, with half a cup of sweet cream and a pinch of salt. A glass of warm milk. Bread and good butter. A soft-boiled egg.

Dinner.—From twelve to one o'clock. Half a cup of beef broth. Bread and butter. One lamb-chop, lightly broiled, and cut in small pieces, or a piece of roast beef or mutton, with dish gravy. One quickly baked potato, broken with a fork, eaten with salt. Two tablespoonfuls of boiled spinach, mashed through a purée sieve. Stewed apples and a lady-finger for dessert.

Supper.—Five to five-thirty o'clock. Milk toast;

one half pint of hot milk seasoned with salt and butter for three or four pieces of toast. A few stewed figs. Bread and butter if wanted.

Monday.

Breakfast.—Breakfast hominy and cream. Bread and butter. A sweet orange. A bit of broiled fish.

Dinner.—One-half cup of mutton broth. Broiled, finely chopped steak, one large spoonful, or one lamb-chop, lightly broiled. Boiled rice, as much as wanted. Stewed celery with cream sauce. Gelatin, flavored with chocolate or vanilla, for dessert.

Supper.—Milk biscuit, broken in hot milk. Bread and butter. Stewed fruit.

Tuesday.

Breakfast.—Two tablespoonfuls of cracked wheat and cream. One poached egg, lightly done. Brown bread and butter. A few dates or an apple.

Dinner.—Half a cup of beef broth, made from the chopped steak and celery bits of the day before. A slice of roast beef with dish gravy. Macaroni, boiled in salted water, cream to be added for sauce. If meat is not available, more macaroni may be used, as it supplies the place of meat and cereals. Two tablespoonfuls of stewed tomatoes, stewed long enough to be put through an agate or porcelain colander. Orange float for dessert (soft cup custard poured over oranges that have been carefully freed from pith).

Supper.—Bread, butter, milk to drink, and stewed apples, flavored with cinnamon or orange.

Wednesday.

Breakfast.—Oatmeal and cream. Dry toast, with cold, not melted, butter. A little stewed potato. A glass of milk. A bit of broiled fish. A sweet orange.

Dinner.—Half a cup of chicken soup. One broiled lamb-chop. Bread and butter. Stewed onions with cream sauce. One baked sweet potato. (Onions have no sugar, hence sweet potato.) Plain or apple tapioca pudding. As sweet potato has not so much starch as white, tapioca (starch) may be used for dessert.

Supper.—Sweet buns or plain rolls, broken up in hot milk, with a light sprinkling of sugar or salt according to which food is used. A dish of stewed prunes, or a glass of prune juice. A slice of Graham bread and butter.

Thursday.

Breakfast.—Two tablespoonfuls of hominy with cream (half a cup). One scrambled egg, with bread and butter. One apple. Cup of weak cocoa, three-quarters milk.

Dinner.—One cup of beef broth. Bread and butter. Spaghetti and milk. Broiled sweetbreads. Stewed celery. Small saucer of rice pudding.

Supper.—Bread, butter, and good molasses or syrup, carefully selected, with as much milk as is wanted.

Friday.

Breakfast.—A saucer of boiled rice, with cream and salt. Bread and butter. A bit of crisp, fat breakfast bacon. Bacon supplies lack of fat in rice. Stewed potatoes. An orange that is sweet.

Dinner.—One cup of beef broth seasoned with celery broth of the day before. Well broiled, boiled, or baked fish having white meat. Baked white potato. One tablespoonful of stewed cauliflower with cream as sauce. Cup custard made with one egg and flavored with cinnamon.

Supper.—Zwieback, stewed figs, bread, butter, and as much milk as is wanted.

Saturday.

Breakfast.—Cracked wheat and cream. Cup of cocoa. Soft-boiled egg, lightly boiled. Bread and butter and a few figs or dates, or, for a younger child, an orange that is sweet.

Dinner.—Half a cup of mutton broth with rice added (one tablespoonful). A tablespoonful of the white meat of chicken or a tender wing. Small saucer of apple sauce. Macaroni. Bread and butter. A coffee cup of junket and one or two lady-fingers, or a sweet bun one day old, for dessert.

Supper.—Bread, butter, and honey, milk, and a small piece of one-day-old Moravian cake, made according to recipe given on page 123, or a piece of home-made sponge cake, gingerbread, or similar simple cake.

Suggestions for Breakfast in Summer for Children from Three to Five.

One only of the following articles, with cream and salt: Cracked wheat, rice, tapioca, breakfast hominy, gluten (containing little or no fat).

One only of the following articles: Eggs boiled (covered with boiling water as directed elsewhere; poached in salted water that does not boil; scrambled (lightly); omelet (eggs not to be separated for beating). For a small omelet use one tablespoonful of hot water to one egg instead of milk, as customary, beat about a dozen times with a fork, and cook quickly; the result will be a deliciously tender omelet. Broiled fish. Broiled bacon. Asparagus tops may be given frequently with any of the above articles.

One only of the following articles: Stewed rhubarb (laxative), orange or lemon jelly (made with gelatin), strawberries (carefully given, noting effect), baked apple, gelatin pudding or calf's-foot jelly, etc.

Summer Dinner Menus from Three to Five Years.

1. Beef broth. Broiled fish. Baked potato. Spinach purée. A ripe, sweet orange for dessert. Bread and butter.

2. Vegetable omelet made with chopped asparagus tips that have been previously boiled tender; or, if preferred, a plain omelet and the asparagus served alone, with or without cream sauce. A small cup of

a good digestible cocoa with educator biscuit for dessert.

3. Chop (lamb) broiled. Boiled rice, served with cream and salt. Bread, butter, and honey. Glass of milk if desired. In place of honey, fruit juice may be used.

4. Mutton broth with barley. Boiled egg. Asparagus tips with salt, or stewed onion with cream sauce. A cup of junket or a cup custard. Bread and butter.

5. Broiled beef pulp. Spaghetti with cream sauce, the sauce to be made with good butter, cream or milk, and flour. Four or five large prunes, stewed or simply freshened by soaking overnight in cold water, after washing well, may be given for dessert. Children who will not eat stewed prunes, or who have grown tired of them, will sometimes welcome the above change.

6. Purée of onion with beef broth, served either together or alone. Farina, cooked with salt and served with cream. Strawberry gelatin for dessert, using the clear juice only for flavoring. Bread and butter.

7. Poached egg served on well-made toast. Cauliflower tops, if tender, or a dish of apple sauce. A saucer of rice pudding flavored with cinnamon. The use of cauliflower and onion should be deferred to the latter part of this period of feeding, and results should be watched very carefully.

Breakfast Combinations for Winter. Designed to Supply Heat.

Amounts to vary according to the age of the child; breakfast meats may be omitted for children under five, as meat at dinner is sufficient at this age.

White grapes; oatmeal and cream; boiled eggs; bread and butter; warm milk to drink.

Stewed apples; cracked wheat and cream; crust muffins; broiled fat bacon; stewed potatoes; mixed milk and cream to drink.

A ripe apple; cornmeal mush and cream; stewed or broiled chicken; baked potatoes; glass of milk; buttered toast.

Tokay grapes; cream or top milk to drink; broiled mutton-chop; hominy with salt; bread and butter.

Farina and cream; broiled steak or creamed fish; cornmeal muffins, good butter; a sweet orange or ripe apple.

Clarified apples; wheatena; cream; whole-meal bread and butter; broiled squab; boiled rice.

Breakfast Menus for a Child who has Reached the Age of Five or Six. Designed Particularly to Supply Food for Second Dentition.

1. Whole-meal wheat bread and butter; oatmeal porridge (the whole grain) and cream; stewed potatoes; broiled fish; fruit.

2. Graham muffins and butter; milk; cornmeal mush

(the whole grain) and cream; stewed chicken; an orange.

3. Corn bread; porridge made from whole wheat ground in a coffee-mill and cooked four hours (the calcareous deposit needed is found in the outside of the grains), served with cream; a poached egg; warm milk to drink; a raw apple.

4. Hominy; cream; whole-meal muffins, made according to recipe for cream muffins; baked potato; broiled fat bacon; milk; stewed fruit or white or Tokay grapes (no seeds or skins).

Dinner menus for this period should be supplied with the proteids of foods in proper proportions (meat, game, fish, oysters, eggs, milk foods, broths, etc.) and with salt-giving foods (fresh vegetables and fruits), and supper should always include whole-meal bread, stewed fruits, and an abundance of milk.

Sample Dinner Menu for Second Dentition.—The following will serve as a sample dinner menu for the second dentition period: a cup of beef broth thickened slightly with oatmeal, or mutton broth with barley; broiled fish, or lamb-chops, with green peas; boiled rice; creamed macaroni or baked potato; whole-meal bread well toasted and buttered when cool, so that the butter will not melt; orange tapioca for dessert.

Notice that there are proteids, to form bone for the teeth, in nearly every food prescribed, and that nevertheless the salts and the starches are not omitted. The

oatmeal in the soup contains proteids and salts; the fish, phosphates; the whole-meal bread, proteids and carbohydrates; the butter, fat; the orange, salts; the tapioca, starch; and the peas contain proteids and salts.

It must not be forgotten that the condition of a child's second set of teeth depends very largely on the kind of food taken during the years immediately preceding second dentition.

Foods Forbidden.

The following foods are forbidden under all circumstances in the nursery until after second dentition, except where indicated:

Ham.
Sausage.
Pork.
Salt fish.
Dried beef.
Corned beef.
Goose.
Duck.
Broiled kidneys.
Stewed kidneys.
Liver and bacon.
Stewed Liver.
Gravy from roast or fried meats, except dish gravy. If carefully made from roasts, without grease, according to recipe
Baked tomatoes.
Stewed tomatoes, except as directed elsewhere.
Fried tomatoes.
Raw tomatoes, except as directed elsewhere.
Fried potatoes.
Pickled beets.
Carrots.
Pastries.
Griddle cakes.
Fresh bread.
Meat pies.
Fruit pies.
Rich cakes.
Hot biscuit.

given in chapter of recipes, it may be used after five years.
Meat stews as usually made, but they may be given if made as directed elsewhere.
Raw celery.
Raw or fried onions.
Radishes.
Cucumbers.
Muffins, unless made as directed elsewhere, when they are permissible for a child of five.
Doughnuts.
Preserves.
Canned fruits.
Tea.
Coffee.
Liquors of all kinds, unless indicated by a physician.

U. S. NAVAL MED. SCHOOL NOV 14 1910 LIBRARY.

Explanatory Lists of the Various Classes of Nursery Foods.

Proteids.—These foods, when eaten and digested, are tissue-builders, and repair waste. More proteid foods are needed in disease than in health, as they are more easily digested than vegetable foods.

Milk.	Partridges.	Mutton.
Eggs.	Gelatin.	Chicken.
Raw oysters.	Beef.	Squabs.
Lamb.	Turkey.	Fish.
Veal.	Pheasant.	

Milk is a complete food in early childhood when growth is active, consisting of—

Proteids	Caseine or cheese.
Carbohydrates	Sugar.
Salts	Phosphates.
Fat	Cream.

Eggs also form a complete food, if the shell, which supplies the chick with salts, is taken into consideration: hence, for children, supplement eggs with salt-giving foods.

Carbohydrates (Starches and Sugars).

(Make heat and stimulate energy.)

Beans.	Peas.	Cornmeal.
Oatmeal.	Graham bread.	Wheat bread.
Graham flour.	Wheat flour.	Barley.
Oats.	Rye.	Graham biscuits.
Boston crackers.	Milk or oyster crackers.	Macaroni.

NOTE.—The above carbohydrates contain a large percentage of proteids; those that follow do not.

White potatoes.	Rice.	Sweet potatoes.
Arrowroot.	Sago.	Tapioca.
Cakes.	Crackers.	Sugars.
Sweets.	Dates.	Molasses.
Muffins.	Bananas.	Figs.

NOTE.—Professor Atwater says, "The vegetable foods are rich in carbohydrates, like starch and sugar, while the meats have not enough to be worth mentioning. On the other hand, the meats abound in protein and fats, of which the vegetables have little. Beans and oatmeal, however, are rich in protein, while fat pork has very little. Carbohydrates are found in the grape-sugar of fruits, the sugar and starch in vegetables and the seed-giving flours."

Salt-Giving Foods.

Green corn.	Spinach.	Celery.
Green peas.	Green string-beans.	Tomatoes.
Fresh Lima beans.	Onions.	Brussels sprouts.
Stewed fruits.	Peaches.	Apples.
Strawberries.	Pears.	Cranberries.

Hydrocarbons or Fats.

Cream.	Bacon fat.	Olive oil.
Butter.	Cod-liver oil.	Cocoa.
Chocolate.		

Summer Diet.—At this season of the year excellence in the preparation of simple foods should be the rule. A steak or a chop perfectly broiled, well-baked bread, pure milk, carefully selected fruit, vegetables that are well chosen and properly prepared, and the avoidance of sweets and pastry, will prove potent factors in carrying a flock of little ones safely through the hot months of summer.

The use of electricity in cooking is another important health factor in summer, when a cool atmosphere is always at a premium, and hard to get.

The approach of warm weather always brings to the thoughtful mother the consciousness of increased care, as this is the season requiring the exercise of much forethought in regard to the diet of the little ones. This is particularly true in regard to food for older children in the summer time, a trying period for the one who provides—not so much in finding variety as in being able

to make the proper selections from the tempting supply of fresh fruits and vegetables offered, and in discarding the foods that are unsuitable for the hot months. Oatmeal, the reliance of many for breakfast in winter, must now be frequently discarded, as it often proves too heating. It may occasionally be used, however, in the form of oat jelly, for children who are very fond of oatmeal, as some will not eat hominy or wheat. The latter is a perfect summer cereal if well cooked, and efforts should be made to teach children to eat it by preparing it in an appetizing manner, serving it daintily, etc.

Summer Breakfasts.—As eggs may be used but two or three times a week, the breakfast menu in summer, taken altogether, is the first stumbling-block, and one likely to give trouble if not considered carefully. Almost all children, especially those of a nervous temperament or an anæmic type, are better for having had a hearty breakfast, and one of sufficient variety to tempt the appetite. If mothers will step out of the beaten track and provide dainty dishes that are not looked for at this hour, they will be surprised to see how quickly their efforts will be appreciated. In season, for children over five, a few sound, perfectly ripe strawberries (only four or five), with the hulls on,—the berries should be sweet enough to eat without sugar,—or half a dozen large cherries (oxhearts), perfectly ripe, laid upon the fruit-plate for the beginning of the meal, followed by dainty slices of well-baked, whole-meal bread and butter, and

half a dozen asparagus tips that have been boiled tender in salted water, with a glass of cold or warm beef tea, as preferred, and a spoonful of well-boiled and well-seasoned rice, will make a most satisfying and appetizing variation from the usual menu of eggs, oatmeal, potatoes, etc., and it will be one that a child will be sure to enjoy.

Dainty Service.—Dainty serving is one of the most important adjuncts in nursery feeding. If the fancy of a child is pleased, he will, in all probability, eat most heartily. On a very hot morning I frequently find that I can invite sufficient appetite on the part of a child not inclined to eat by building engines or toy houses, etc., of small pieces of bread, well buttered with *cold* butter. A little lump of butter should be placed on each piece of bread, not spread on in the usual nursery style, which, to say the least, is not inviting; a very few crisp bits of fat broiled bacon may here and there take the place of butter. This may all be put upon a decorated plate to suggest a story to the child. I have often seen a delicate child, one of the kind who would rather play than eat, take unconsciously a satisfactory meal while he was being entertained with an interesting story about a dear little cherub on his plate who was pictured as eating an apple. I have seen this same child drink glass after glass of milk when it was served in a wine-glass with a stem, whereas he would invariably refuse milk if it was given in a cup or a tumbler, saying he was not hungry. There is a fitness of things that must

be considered when feeding children, and at nó time is it more necessary than in summer, when the intense heat tries the temper even of adults, who are certainly more resistant than children to the various climatic changes to which we are usually subjected.

A Cool-Looking Dining Room.—A cool-looking dining room, shaded to rest the eyes, with inviting napery and pretty table appointments, flowers, etc., is inseparable from comfortable summer life. What could be more inviting to the eye, as well as to the appetite, of a fretful child who has probably been awakened too early by the heat, or who has passed a restless night for the same reason, than the sight of a prettily laid breakfast table,—flowers, fruits, and some little surprise at his plate to charm away his languor? A dish of cold snow pudding, which contains ingredients that are all beneficial for a child (gelatin, eggs, fruit juice, etc.), will work like a charm. A glass of milk and a few dainty fingers of bread and butter will complete a satisfactory breakfast for hot weather. It is well to remember in midsummer-time that a light early breakfast is preferable to a heavy later one, if it is supplemented by a glass of milk or of beef tea, with a few crackers or a piece of zwieback, to be given midway between breakfast and dinner. Beef broth or cocoa should be given instead of milk to drink, when cherries or strawberries are taken at breakfast. When cherries are given, they must be in perfect condition, and results must be carefully noted. Unless stewed,

they are frequently not a safe fruit until after second dentition.

Tapioca is of great value in summer diet. It may be used in a variety of ways for any meal in the day, either for dinner dessert or for the main portion of the breakfast or supper meal.

During very hot weather meat should be sparingly used; broths, eggs, milk, and macaroni should take its place. Baked potatoes and rice are preferable for starchy foods at this season. Rice possesses no fat, and potatoes are nearly all water.

Simple Dinners.—Avoid at all times, but especially in summer, the use of sweets that are cloying, over- or under-ripe fruit, stale vegetables, and too much meat. Carbohydrates (sugars and starches) should be given in the proportion of four to one of proteids (meat, eggs, etc.). When corn is young and tender, a corn omelet, with bread and butter and a glass of milk, make a satisfactory dinner for a hot day. Score the grains of corn through the middle, and press out enough pulp to flavor an omelet. Use the recipe given elsewhere for a tender omelet, putting in the vegetable pulp just before folding, as it requires but a few minutes for cooking. Do not allow the omelet to get dry. It should be moist and soft when served. This is delicious when properly cooked and well seasoned. Purée of stewed onions, or a teaspoonful of raw onion juice, or grated onion, or any other vegetable allowed in the nursery, may be used instead of the corn pulp for making these

omelets. This plan of only one or two dishes for dinner should not be followed continuously. It is suggested for the occasional relief of the busy mother who at this season of the year finds herself overtaxed, and she must receive her due share of consideration in all these matters, as a child's well-being, not only physically but mentally, depends upon the mother's condition. An occasional use of this plan prevents satiety also upon the part of the child.

Macaroni or spaghetti, boiled tender first and then simmered in beef broth, cream, or milk, is a perfect one-course dinner for a child over five, and one that is usually appreciated. A glass of milk and bread and butter should be given with it.

Use of Summer Desserts as Supplementary Foods.—Desserts in summer may frequently be supplementary foods. By this I mean that eggs, rice, tapioca, milk, etc., may be freely used in desserts, and this portion of the meal may contain a large share of the nourishment required for the entire meal. In this form these ingredients are easily digested, and the other part of a menu containing one of these desserts need not be so heavy as in cold weather, thus somewhat relieving digestion at a time when relief is required.

Summer Suppers.—What to give to the children for supper, especially in summer, may seem a trifling matter, yet it is really of the utmost importance. A child's rest at night depends very largely upon what it has had to eat at this meal. Two safe rules to follow

are, never to give a heavy supper, and never, if possible, to give it later than five or half-past five o'clock, until a child is six years old, thus leaving an hour and a half to intervene before it is time for the nightly sponge, which is so refreshing before bedtime in hot weather, and which, with a well-selected supper, induces sleep in defiance of the heat, however oppressive. I find it is not unusual for mothers to give the evening meal to their little ones as late as half-past six or seven o'clock, in some instances as late as half-past seven, for their own convenience, and yet they will visit physicians regularly and ask advice as to what should be done to make their children sleep soundly, complaining that they are restless, wakeful, easily disturbed, etc. A child who has had a simple and early supper will be found, if well, to protest against being disturbed, and will want to sleep. It is possible and very desirable to give even a baby its ten or eleven o'clock bottle, which should be its last feeding for the night, without thoroughly awaking it, thus encouraging the habit of continuous sleep from seven to seven, which, once established, is the greatest boon that a tired mother can ask, and is of equal benefit to the child.

Sleeplessness or disturbed sleep in a child either points to a faulty regimen or is the forerunner of disease, and it invariably needs attention and correction. It is one of the safest indications for the mother who is concerned as to the condition of her child.

The old-fashioned *bowl of bread and milk* cannot be improved upon for a child's supper, if the milk be

sweet and the bread well baked and made of good flour. Graham biscuit in place of the bread, with clarified apples made according to the recipe given, is another simple yet desirable summer menu. An occasional dish of rice and milk or a baked potato is frequently suggested, and may be admissible, but it is much wiser in hot weather to reserve rice for breakfast—to be used instead of the more heating cereals—and baked potatoes for dinner. With well-cooked rice or wheat for breakfast, potato, macaroni, or spaghetti for dinner, and the occasional use of farina or tapioca, the matter of starchy foods in summer should be pretty well covered, leaving supper menus to be supplied with dishes that are more simple and more certain of not disturbing a night's rest.

How to Use Fruit.—The use of stewed fruit is to be advocated for all times and all seasons of the year, after two and one-half years; and, if fruit at all be given at the evening meal, it should be cooked. Fresh fruit should never be given to children after dinner. I have frequently heard this question discussed, and many mothers are in favor of giving it later in the day; but I cannot alter my opinion that fresh fruit should not be given to young children later than at the one o'clock dinner. There is no necessity, at any rate, for doing so, as any child, if treated wisely, will care far more for his bread and milk or Graham biscuit and milk than for all the fruit you may offer him. I frequently find that even the dish of stewed fruit is not appreciated as much for supper-time as for breakfast, at which time it is often

eaten with great relish, and is usually the first dish to be called for. Sinee the discovery of this fact, I have often changed my nursery menus in this direction, omitting the use of any kind of fruit at supper-time unless it is asked for, and giving stewed fruit for breakfast, reserving fresh fruit for dinner menus in summer, when little meat or fat is taken. In this way I find it easier to fit it in with the different milk dishes, which sometimes cause trouble when used with fresh fruit, and thus there is less likelihood of consequent disagreement. At the risk of being tedious, it seems advisable to lay stress upon points like these, even if they do appear to be self-evident. Milk should, for instance, form a large portion of the breakfast menu, and with the use of milk it is usually very much better for children under five to have stewed fruit instead of the average so-called ripe fruit that is sold so often in our markets. For this reason chiefly I prefer using at breakfast-time fruits that have been stewed, as less likely to cause trouble, and fresh fruit that is really ripe for dinner, when milk is usually omitted from the menu. This rule is not an inflexible one, however, and any mother who is sure of the condition of the fruit she buys—that it is perfectly fresh, sound, and ripe, not over- or under-ripe—may follow the usually suggested plan of fresh fruits for breakfast and stewed fruits for supper, with puddings, etc., for desserts for dinner. I have, however, found the other plan perfectly practicable, and a great relief in hot weather.

Drinking Enough Water.—A copious drink of water about an hour after supper is an important feature in regulating a child's condition, and it should never be neglected, especially in summer. A child four or five years old should drink at least half a pint of water between five o'clock supper and seven o'clock bedtime. The habit of drinking water both morning and evening can be cultivated with a little care, and it is a habit of great importance throughout life in its result upon sluggish conditions. That this fact is not fully appreciated is evidenced by the constant cry in the nursery for laxative medicines, which are used and advised far too frequently.

Simple Supper Dishes for Summer and Winter Alike.

(After two and a half years.)

Milk toast, zwieback, bread and milk, bread and butter (home-made bread, one day old), sugar rusk, Graham biscuit, Graham biscuit sandwiches with good butter (nothing else) between, stewed apples, etc., if desired, with as much sweet milk as the child will drink or use with the above.

Diet for the Approach of Cool Weather.—The approach of cooler weather is the herald for the modifications in diet that are necessary for keeping a child resistant to sudden variations of temperature, for supplying sufficient warmth, and for providing energy to meet the activity induced by the pleasant

change from the enervating months of summer. Any observant mother will see at once how quickly her children have been influenced by this change, how much more active they have become, and how appetite has improved; hence the necessity for a fuller diet. Oatmeal may now be used for breakfast, served with cream; this combination, containing fat and starch, supplies heat. A moderate amount of sugar is permissible, and some physicians say advisable, in cool weather if the digestion is good, but it must not be given to children who are in the habit of eating quantities of candy between meals, as in all probability they receive far more sugar than they can digest, and it would be ruinous to give them more.

No Cake or Candy.—Dr. Rotch says, "The infant should never be given cake or candy, even to taste. I think that it is necessary to state this very decidedly, because it is an erroneous view which is held by most mothers that it can do no harm to give occasionally to an infant in its second year of life, or to a young child, a little candy or a little cake. This may be true so far as the immediate effect these articles may have on the digestion is concerned, but it is of far more importance that the infant should not have its taste perverted from those articles of diet which are best for its nutrition. These new articles appeal more strongly to its sense of taste, and allow it to know that there is something which tastes more agreeable than the food which it is accustomed to have. When an infant has

acquired a taste for cake or candy, it will cease to enjoy the food by which its development will be best perfected. It is, in fact, kinder to the infant never to allow it to taste cake or candy. When these articles are withheld, it will continue to have a healthy appetite and taste for necessary and proper articles of food."

Use of Sugar on Cereals.—A very satisfactory way of giving sugar on oatmeal to a child who has already acquired the habit is to sprinkle it lightly over each spoonful, using a large salt-shaker. A trial will show that less than a teaspoonful will be required for an entire saucer of porridge, if care is given to the shaking. The least possible shake will usually suffice. This suggestion is intended to help those mothers who perhaps may have unwisely allowed their little ones to eat cereals bountifully sprinkled with sugar. So far as possible, it is safer to keep a child from knowing anything about eating it with food of any kind; but, if the habit has once been formed, try regulating it in this way, and see if the child will not infinitely prefer the sweet gritty taste of the few granules he gets by sprinkling each spoonful immediately before he eats it to eating a syrupy concoction of porridge, milk, and a larger quantity that has dissolved. I have seen a child of seven call for lump after lump of sugar for a small cup of cocoa simply because each lump dissolved before she could taste it, and she had no idea whatever of what sweet really meant. I have frequently seen this fact

clearly demonstrated. I have also seen a child eat very contentedly a whole dish of oatmeal and cream minus salt or sugar, never missing the sugar, although accustomed to a little, because he was too intent upon something else to think of the action required to shake it over each teaspoonful of porridge. By simply watching children as they eat, I have come to the conclusion that it is not necessary to sweeten foods to any great extent to gratify their palates, even if they have acquired the taste. If they must have sugar, let them have it just as it comes from the grocer,—a lump after dinner for dessert; or, on special occasions, as a supplement to an unsatisfactory meal, it may be sprinkled very lightly upon a piece of bread and butter. When sugar is handled carefully, it may be made a very important article of food, as, with a good digestion, it gives heat and energy and is easily assimilated. Efforts should always be made to supply it largely in its natural state, as in fruits, etc.

Cool Morning Breakfasts.—*For chilly days cornmeal mush* may also be used for breakfast. The use of wheat and hominy need not be abandoned, but oatmeal and cornmeal may now be used for the variations needed in the more liberal and heat-giving dietary required for cooler weather. An occasional baked potato is a pleasant addition to the breakfast menu (supplying starch and salts), or a baked apple served with top milk, or pure sweet cream, if attainable, leaving this menu to be very simply completed with bread and butter and a dish

of rice or hominy, the starch element (carbohydrates) necessary to make a perfect combination. The apple is to be peeled before baking. Graham or corn-meal muffins, if thoroughly baked and made thin so that they are nearly all crust, will be enjoyed on cool mornings, and if made in this way they will be far more wholesome than stale bread that has been poorly baked. Too frequently the only virtue, so called, of one-day-old bread is the fact that it *is* stale. When muffins are crisp and dry throughout, they are appetizing and wholesome. They should not be given to a child when hot enough to melt the butter used, but when they are cool enough to put butter on in small pieces they will answer every purpose of good bread, and prove a pleasant variation.

Dinner Menus in Cooler Weather. — For dinner menus in cooler weather a more liberal allowance of starchy foods may be used, such as potatoes, rice, purées of peas and beans, with tapioca and corn starch for desserts ; instead of the broths, meats may be used every day, and fish occasionally in summer ; puddings may now appear for desserts alternately with fruits, not forgetting that salts must be supplied in these menus by giving a green vegetable in connection ; as, for instance, rare roast beef (proteid), baked potato (starch and salts—carbohydrate), dish gravy, purée of spinach (salts), with wine jelly for dessert ; or, as a contrasting menu, roast lamb (proteid), rice (starch—served with salt and cream to supply fat lacking in rice), and dish

gravy, with some wholesome fruit, fresh or stewed, for dessert, thus supplying the necessary salts.

Supper Menus should continue the same as those indicated for summer use, allowing the child to satisfy his appetite by taking as much bread and milk as he desires, or whatever else is given in its place. It can never be insisted upon too much that children should have light suppers, and that digestion should have its hardest work to do during the day, before evening comes. If care is taken in this direction, sleep will be sound, and rest will be refreshing. There is no more perfect food combination for a child's supper than a bowl of bread and milk; in many nurseries this fact seems to be entirely overlooked. It is easily prepared, contains all the elements necessary for a perfect food, and deserves a prominent place in a child's dietary, provided the milk be pure and the bread wholesome. If by any unavoidable circumstance a child has been deprived of a sufficient amount of nourishment during the day, as sometimes happens when travelling, and a capricious appetite interferes with the enjoyment of the bowl of bread and milk for supper, try a raw egg beaten up very light, with a breakfast-cupful of milk, a little sugar, and a pinch of cinnamon added. This, with a piece of bread and butter, will make a full and easily digested meal, and is allowable for the evening meal under special circumstances.

This is a fact to remember when one is away from home with children, and, through disinclination to give

trouble, subject to dietetic difficulties that frequently seem insurmountable.

Diet in Illness.

Fonssagrives says, "Nursing is an instinct with women: a little added art would do no harm." Prevention is always better than cure; and early care, with prompt recognition and treatment of symptoms, in conditions not normal, is far better than to allow the development of fevers, rickets, marasmus, and other innumerable ills to which children are constantly subjected unnecessarily on account of ignorance and carelessness upon the part of those who are responsible. The late Dr. John S. Parry, of Philadelphia, stated that more than one-quarter of all the children between the ages of one month and five years who came under his observation in the Philadelphia Hospital during a period of three years were rachitic. Dr. Gee, of London, says that of the patients under the age of two years who have come under his observation in the London Hospital, one-third were rachitic."

Bruen says, "The digestion of an infant should never be forced; the true index may be found by studying the actions of the bowels. No method of feeding should be tolerated until the passages show that the food is being digested and appropriated."

Process of Digestion.—It is usually supposed that every one interested in dietetics knows that digestion is the process that prepares food for absorption into the

blood, and that by assimilation the different elements of food are selected for their work in the body; that the teeth chew the food, and the saliva moistens it, making a beginning by partially digesting the starch in food, and that the stomach continues the work, followed by the intestines. But a clear understanding of this process is very rare among the laity. Inasmuch as every alimentary organ has its specific work to do, it must be plain that certain conditions call for certain foods; that when digestion is faulty or disordered in any way, advice is necessary as to which class of foods are to be withheld and which are to be given; as, for instance, in typhoid fever there should be no tax upon the intestines, and foods must, therefore, be given that are easily absorbed and digested in the stomach, such as peptonized milk or beef, white of egg in water, koumyss, etc.

Mothers frequently err grievously in one direction, no doubt from lack of knowledge, in not seeing the advisability of *total abstinence from food in cases of doubt*, at least until a physician can be called. It is always the safest plan to follow, and it is the only way, sometimes, by which absolute rest can be obtained for the diseased parts.

Preventive Diet.—Fonssagrives says, "The number of cases of disease which can be arrested in children by instituting a preventive diet is almost incredible. In them the digestive functions are in a state of activity proportionate to the need felt by their system for air and growth, and they are invariably involved in any

attack of disease. What, then, is more natural and more salutary than to give them rest at the outset of an indisposition; but what is less commonly practiced? This matter of diet has, in recent years, been the subject of very important research, and it is now sufficiently cleared up; but what I do maintain is that it is a question of the very greatest delicacy, which embarrasses educated physicians themselves, and consequently could not be authoritatively solved in the family. . . . One other piece of advice to mothers, not less salutary, is to restrict the treatment of an indisposition to diet alone. It almost always suffices for a cure, and if the attack must end in a disease, the ground has been cleared, the physician's action facilitated, and future complications rendered less probable."

Fonssagrives' Rules to Follow in Illness.

"Do not give food, even light food, in a condition of fever, unless the physician has recognized its propriety.

"Treat indisposition by diet, and begin it as soon as may be.

"Observe the effects of articles of food, and preserve the motions, to show to the physician.

"Always ask the physician in regard to the interval which should elapse between the food and the medicine prescribed; feed children chiefly at their habitual meal-times, and give them only liquid food after four or five o'clock in the evening.

"It is more important to preserve, as much as pos-

sible, the regularity of a child's meals, even when taken with an acute disease. If it is only a broth, it is better to give it at the usual hours of eating. The disease of itself breaks in sufficiently upon established habits, without our intentionally adding to the disorder.

"Note the likes and dislikes of patients in the matter of food, and do not insist upon dishes which disgust them. Nothing is less scientific that the absolute specification of the articles of food to be given. The physician should designate *classes of food*, so that the mother may choose, within their limits, the particular article which the child most desires. It has been said, with reason, that a dish desired is half digested, and it is true of all ages. Yet it must be remarked that those mothers who understand the matter direct their children's alimentary tastes into almost any channel they please, or divert their repugnances by artifices known to themselves. They have nothing to learn in this respect.

"Give only food of the very best quality and prepared with fastidious care."

Liquid, Light, and Convalescent's Diet.—Another frequent source of trouble is met with in the effort to bring about an adequate comprehension of the terms liquid diet, light diet, convalescent diet, etc. Directions are frequently given to mothers and nurses in this general manner. Nurses are supposed to know what these terms mean, but many mothers need information in this respect. One might think a broiled

chop and a baked potato constituted a very light diet, whilst another would think it should be corn starch pudding, tea, and toast. Referring to this subject, the late Professor Gross, of Philadelphia,—to whose utterances the weight of authority has always been accorded, —once said, "The diet of the sick-room has slain its thousands and tens of thousands. Broths and slops and jellies and custards and ptisans are usually as disgusting as they are pernicious. Men worn out by disease and injury must have nutritious and concentrated food. The ordinary preparations for the sick are, in general, not only not nutritious, but insipid and flatulent. Animal soups are among the most efficient supporters of the exhausted system, and every medical man should know how to give directions for their preparation. The life of a man is his food. Solid articles are, of course, withheld in acute diseases in their earlier stages; but when the patient begins to convalesce, they are frequently borne with impunity and greatly promote recovery. All animal soups should be made of lean meat, and their nutritious properties, as well as the flavor, may be much increased by the addition of some vegetable substances, as rice or barley."

Ask Physicians for Definite Directions.— Directions should be specific if they are to be of benefit. Mothers should ask physicians for definite directions, and insist upon having them, and then follow them to the letter.

The usual acceptation of the term liquid diet implies

meat broths, milk, whether peptonized or not, beef juice, gruels, barley water, white of egg, mulled egg, whey, wine and water, etc., all of which are to be given under the direction of the physician, as it is during fevers and acute stages of disease that they are required. It is a difficult and important matter to determine the kind and quality required during twenty-four hours, the intervals to be allowed, and the temperature of the liquid foods to be given.

Light diet is the term usually employed to designate the foods to be given during convalescence, and consists of very simple and easily digested foods. Fresh-laid eggs may be used when changing from the broth diet to solid food. They should be cooked in hot water, as directed elsewhere. Fonssagrives gives a method that he asserts to be infallible for making the whites of eggs milky in cooking, which he says is the proof of good cooking and the promise of easy digestion. It is to have a tumbler (or a cup) filled with water brought to the boiling-point, in which the egg is to be placed; withdraw the glass or cup from the heat, and take out the egg when it can be done without scalding the fingers. Eight minutes' immersion in boiling water that has been taken from the source of heat and covered will usually be found to serve the purpose. Something depends upon the freshness of the egg.

Light diet consists of everything included in liquid diet, fruit, such as grapes and oranges, boiled or poached eggs, dry and milk toast, all the soups allowed in the

nursery, delicate puddings, scraped beef, the tender part of oysters, jellies made with gelatin, either sweet, with fruit flavoring or wine, or not sweet, using salt with meat and chicken broths, etc. The change to light from liquid diet should be very gradually made, adding one new food at a time.

The following rules should always be observed in preparing, cooking, and serving food for the sick: "All the utensils employed should be scrupulously clean. Never make a large quantity of one thing at a time. Serve everything in as tempting a form as possible. Put only a small quantity of an article on a dish at a time. Keep milk and other delicacies on ice in warm weather. Never leave food about a sick-room. Never offer beef tea or broth with the smallest particle of fat or grease on it."

Convalescent Diet differs only from the ordinary diet to which the child is accustomed in its extreme simplicity and the small quantities allowed. One or two foods only should be used at one meal. Bread, fresh eggs, fish, oysters, meat and cooked fruits, and a few of the most easily digested vegetables, are the foods from which to select. Remember that the sudden sight of food is sometimes an appetizer, and that a convalescent will often eat what is brought to him unawares, and refuse to eat what he has himself been asked to choose, or deny that he has an appetite when food is mentioned.

Practical Points by Dr. Burnet Concerning Food in Illness.—The following is a summary of prac-

tical points for use with children, as suggested by the remarks of R. W. Burnet, M.D.,* concerning foods in illness: Drinking hot water at bedtime and cold or hot in the morning before breakfast for dyspeptic disorders; —a teaspoonful of malt added to a cup of milk when keeping up milk diet for growing boys and girls who are anæmic;—the use of additional cream in food as a laxative;—in mucous diarrhœa to use farinaceous foods, such as arrowroot, tapioca, sago, with milk, white of egg, to give small quantities of food at short intervals, to keep the patient warm, the food to be neither hot nor cold, to be eaten slowly, a teaspoonful at a time, to use brandy if physician advises, and to use meat juice when farinaceous foods will not do;—in kidney troubles, often following scarlet fever, etc., to feed very lightly, to cut down albuminoids under the physician's advice, to use milk as a sole diet for children in this trouble, and for convalescence to give the usual nursery menus minus meat;—in scurvy, caused by restricted diet, if fresh vegetables or fruit cannot be had, to use lemon juice (purées are a useful form for vegetables in this trouble, and all softer foods of nursery dietaries).

Diet for Anæmic Children.—Anæmia may occur in connection with all diseases. For dietaries for anæmic children any of the nursery menus given may be used, with a glass of cocoa or beef tea half-way between meals, and before bed a cup of peptonized or malted

* Foods and Dietaries.

milk (a teaspoonful of extract of malt to a cup of milk). Cream added to whey is a useful food for children of consumptive inheritance. They should early have salts of tender meats, vegetables and fruits, a sufficient quantity of milk, open-air life, little study, and an abundant and easily assimilated diet. Bronchitis requires a liberal dietary of light, nourishing food. Diphtheria requires abundant nourishment. There is danger of overfeeding in typhoid fever; milk should be carefully taken, and it should be peptonized when used. In diarrhœa, gelatin and arrowroot, white of egg and water, peptonized milk, etc., are useful. Special dietaries must be given by the physician, as each case must be individualized, and we should be able to select the kind of food required and the form in which to give it, and also to direct how it should be prepared.

Foods that are decidedly laxative and allowable for children are ripe peaches, stewed rhubarb, stewed or dried prunes, figs, dates, oranges, apples, oatmeal porridge, bran mush, Indian meal mush, whole meal bread, rye and Graham bread, all cereals made of the whole grain, tomatoes, spinach, boiled Spanish onions, etc.

Dr. Thompson says:*

"Gingerbread, especially for children, is sometimes efficacious.

"Grape juice is somewhat laxative.

---

* Practical Dietetics, by W. Gilman Thompson, M.D.

"Olive oil or cod-liver oil, if taken at bedtime into an empty stomach, is laxative for some persons, especially children.

"With many persons having imperfect digestion raw fruits disagree; and, since their laxative properties are not much weakened by being cooked, it is better to eat them in that form."

Use of Water as a Laxative.—A baby should be offered water six or seven times a day. For older children, it should be remembered that water is needed according to activity and to bodily temperature,—the greater the activity, the greater the need for water.

A child weighing forty pounds should drink at least twenty ounces of water a day, and hot weather calls for more.

Rules for Cases of Poisoning.—Inasmuch as children are frequently poisoned by eating sweets improperly prepared, or berries, or seeds, or by sucking painted toys, their treatment under such conditions becomes a matter very closely related to dietetics. Jane H. Walker, M.D., says:* "The first and most important thing is to make the child vomit as speedily as possible, . . . to tickle the back of the throat with a feather, and give large drinks of lukewarm water, or of mustard and warm water. A teaspoonful of mustard in a tumbler of warm water is very efficacious. Greasy

* A Book for Every Woman, Longmans, Green & Co.

or soapy water, if it is the readiest obtainable, does perfectly ; soapy water has the advantage that if the poisonous substance taken be an acid, it is an excellent antidote. See that the child is repeatedly nauseated, and then give it bland, soothing substances, such as white of egg beaten up, milk, barley water, or oil. These help if the poison has been of an irritating character, such as carbolic acid.

"If there is great depression, stimulants must be given and hot-water bottles applied. The best stimulant is strong hot tea, because it is an antidote to many poisons.

"If there is great tendency to sleep, it must be prevented at all cost. This tendency generally shows that opium in one of its numerous preparations has been taken, and sleep indulged in at this time will probably be the sleep that knows no waking. When the poisonous substance that has been taken is known, the method of procedure differs with the particular poison."

Antidotes for Poisons.

Useful Hints for Emergencies.

In cases where the other articles to be used as antidotes are not in the house, give two tablespoonfuls of made mustard in a pint of warm water. Also give large draughts of warm milk or water mixed with oil, butter, or lard. If possible, give as follows:

For bedbug poison, blue vitriol, corrosive sublimate, lead water, saltpetre, sugar of lead, sulphate of zinc, red precipitate, vermilion,	Give milk or white of eggs in large quantities.
For Fowler's solution, white precipitate, arsenic,	Give prompt emetic of mustard and salt, tablespoonful of each; follow with sweet oil, butter, or milk.
For antimonial wine, tartar emetic,	Drink warm water to encourage vomiting. If vomiting does not stop, give a grain of opium in water.
For oil of vitriol, aqua fortis, bicarbonate of potassium, hydrochloric acid, oxalic acid,	Magnesia or soap dissolved in water, every two minutes.
For caustic soda, caustic potash, volatile alkali,	Drink freely of water with vinegar or lemon juice in it.
For carbolic acid,	Give flour and water or glutinous drinks (olive oil in large quantities, then an emetic, is recommended by Dr. Walker).
For chloral hydrate, chloroform,	Pour cold water over the head and face, with artificial respiration, and galvanic battery.

For carbonate of sodium, copperas, cobalt,	Prompt emetics; soap or mucilaginous drinks.
For laudanum, morphine, opium (paregoric carminatives,	Strong coffee, followed by ground mustard or grease in warm water to produce vomiting. Keep in motion.
For nitrate of silver,	Give common salt in water.
For strychnine (rat and beetle paste), tincture of nux vomica,	Emetic of mustard or sulphate of zinc, aided by warm water.*

Diet for School-Children.—Yeo emphasizes the period of school-life as one of the most critical and important epochs in the life of children as regards adequate nutrition. He says that at this period there is not only continuous growth and development, but remarkable activity, which demands a complete and liberal dietary. Teachers in boarding-schools are apt to overlook this fact, and parents, as a rule, know little of the necessity for additional care at this time, with the result only too often of the foundation being laid for future disease, or of the undermining of strength that should be held in reserve for later life. Both body and mind are undergoing rapid development at this time, and the greatest care should be exercised. The food must be abundant, and must contain sufficient proteids, starches, sugars, and inorganic salts to meet the constant demand

* American Analyst.

for these constituents of a perfect food. It must be remembered that this is a period when digestion and assimilation are active. It is a frequent custom among mothers of growing boys and girls going to school to jest about their immense appetites, and not only to jest, but actually to limit supplies of certain foods especially needed at this period. The custom of sending children to school upon a light breakfast or none at all, with a cold luncheon for the noon meal, is reprehensible to the last degree. Or, if a hot dinner is provided, the habit of rushing home at noon in a limited time to consume eagerly and rapidly the food which should be eaten leisurely and enjoyed, should not be allowed under any circumstances. If school laws are rigid, remember that parental authority should be absolute, and insist upon different hours; or, if nothing better can be done, keep the child away for the time required, irrespective of late-marks, etc. Such action, if concerted, would speedily bring authorities to the point of meeting existing needs in this direction. Do not forget that there is a lifetime for study and only part of one during which the physical building-up process can be regulated.

Good Rules to Follow.—To sum up the rules laid down by Yeo, Dukes, Thompson, and others, the foods required during this period are as follows: Well-made whole-meal bread; as much butter as is desired; an abundant supply of milk all through adolescence; starches and sugars should be freely supplied (giving heat and force); meat twice a day; fish for delicate

feeders; green vegetables in abundance, either alone or in vegetable soups (to prevent eczema); suppers should be light, not stimulating; the craving for sweets should be satisfied with moderation and wisdom in selection; a free use of salads should be made; all cooking should be carefully looked after, and food should be made savory and appetizing; in fact, the rules given by dietists for early life should be carried out through the entire period of childhood to adult life, and, indeed, many of the suggestions may be followed with benefit even then.

Treatment of Feeble School Children.—Dr. Thompson says many children inherit feeble constitutions, such as the scrofulous, rachitic, and gouty, which must be combated through the whole period of childhood. He says such children are better at home, where they can be under constant observation and proper dietetic treatment, or country schools can be found for them where such matters are made the subject of special consideration. He speaks of the large number of cases of anæmia and chlorosis seen in young girls which he says are directly traceable to malnutrition from faulty diet. This fact may serve to show to some parents why Providence, as they say, has so frequently afflicted their growing daughters with delicate health, which is more frequently their lament than their shame. I think it was Shirley Dare who said that the day will come when many forms of illness will be considered a discredit to those involved. As the knowledge of causes

increases there will certainly come a less ready willingness to credit everything to a hitherto much-abused Providence. The patience of physicians in dealing with this class of diseases is a constantly growing marvel.

Inasmuch as Dr. Thompson* has covered the subject of school diet so thoroughly, liberal quotations are made in the interest of our readers.

"**Girls take much less exercise than boys,** as a rule, and are more apt to become constipated. This difficulty may be increased by lack of sufficient fresh vegetables or fruit in their diet, and if prolonged it is enough in itself to cause anæmia. The latter (anæmia) may also be brought about by insufficient good animal food. It should be the imperative duty of every head master of a school for children to realize the responsibilities of rightly developing the physical constitution of those intrusted to his care, and to make a thorough study of the questions of dietetics involved.

"An important consideration in school diet is to *prevent monotony*, which becomes so common from economic reasons, or more often from carelessness. It is much easier to yield to routine and force of habit, or to leave the matter to the indiscretions of an unintelligent cook. But a little study and thought expended upon this subject can always result in *furnishing variety in a wholesome diet* without material increase of expense.

* Practical Dietetics, W. Gilman Thompson, M.D.

"The *hours for study and for meals* should be so regulated that sufficient time should be allowed before each meal for children to wash and prepare themselves comfortably, without going to the table excited by hurry, and they *should be required to remain at the table throughout a fixed time*, never being allowed to hastily swallow their food in order to complete an unfinished task or game. An *interval of half an hour* or more should intervene for recreation after meals, in order that digestion may be well under way before any mental exertion is required. *Constant nibbling* at food between meals should be *forbidden;* it destroys the appetite, increases the saliva, and interferes with gastric digestion. The *number of meals* for children should be *adapted to the age* of the pupils. For young children from ten to twelve or thirteen years of age it may be necessary to furnish food somewhat oftener than for the older ones.

"If children live at a distance from their school, or if they are weak and easily fatigued and inclined to sleep over in the morning, their *hours for study should be so adjusted that they are never obliged to hurry their eating* in order to be on time for school work. The *teachers* should consider themselves *quite as responsible* for regulating this matter as are the *parents.*

"*Children should never be hurried off to school in the morning with an insufficient and rapidly eaten breakfast.* Their appetites are often poor at this hour from the effects of an ill-ventilated sleeping apartment,

and if they are subsequently kept at school for five hours without luncheon they will be very ill prepared for mental work. Or they ride to school without exercise after a hasty breakfast, take a hurried cold lunch at noon, and perhaps a warmed-over late dinner, and at six or seven o'clock a fourth meal, after which they are expected to study and go to bed.

"It is being more and more realized by teachers and the public in general that the *breaking down of health at school is quite as often, if not oftener, due to impoverished nutrition than to overwork.*

"A fact which is often overlooked in the dietetic treatment of growing children is that their digestive processes are so active that the stomach is emptied somewhat sooner than in the case of adults, and, their meals being promptly absorbed, *it is natural for them to become hungry if the intervals between the hours of eating are prolonged.* In some schools, children are given their last meal of the day at six o'clock in the evening, and they may not breakfast until seven or half-past seven, or even later, leaving an *interval of over thirteen hours during which they have no food at all.* The evening meal is usually made light, on the ground that they can sleep better, and it is therefore sooner digested. *Robust children can*, perhaps, *thrive* on this treatment, but *those less strong* are *injured* by it. For some school-children of from ten to fourteen years of age it will be much better to give the evening meal later, at say seven o'clock, and the breakfast at half-past

six or seven, and if they awaken hungry during the night, there is *no harm in their having a glass of milk and a cracker.*

"*Very delicate children* whose appetites are poor and who do not do justice to their regular meals *should be given an extra allowance* of hot broth or hot milk, or an occasional cup of chocolate, with bread and butter and rusk, *between meals.*

"*These* general *rules* are *applicable in cases of children who,* during one or two years, *seem to develop* with *extraordinary suddenness and rapidity,* growing sometimes two inches or more in six months, and attaining a height quite disproportionate to their frames. The demands of this rapid growth must be met by proper nutrition, or serious subsequent impairment of vitality may result. Such children should have their meals made tempting by good cooking and pleasant variety, as well as an agreeable appearance of the food.

"Meat which is carved in unsightly masses, and vegetables which are sodden and tasteless, will be refused, and an ill attempt is made to supply the deficiency in proper food by eating indigestible candy, nuts, etc. Children often have no natural liking for meat, and prefer puddings, pastry, or sweets when they can obtain them, and *it is the more important that meat should be made attractive to them at the age when they need it.*

"It is unnecessary to discuss further *questions* which, after all, *must be controlled by tact and circumstances of indivdiual cases, and the line must be drawn with*

care between making a child too fastidious on the one hand in regard to the nature of its food, and, *on the other hand, impairing its constitution by monotony of diet and ill-cooked viands.* Children at school should especially be *required to eat slowly*, for the habit of fast eating is almost contagious, and, as it is much *easier to acquire than to overcome*, the foundation of dyspepsia and life-long discomfort may be laid in this way in childhood."

A Sample School Diet.—"If early rising is insisted upon, a *child should never be set any task before breakfast*, especially in winter, and if it is not expedient to serve a full breakfast at half-past six or seven, the child should be given a bowl of hot milk and bread, or a cup of cocoa with a roll, or other light food; breakfast may be served later, after the first exercises of the morning, and should be a substantial meal with animal food in the form of either fish, or eggs, or cold meat of some sort, with porridge of wheaten grits, or hominy with milk or cream and abundant sugar, also bread and butter, with some sweets in the form of jam, or marmalade, or stewed fruit. Dinner, which should always be served near the middle of the day, should comprise meat, potatoes, with one or two green vegetables, and some form of sweet pudding. The supper, it is generally admitted, should comprise only easily digested articles of food, and such substances as pastry, cheese and meats are better omitted. It should consist of either a porridge with milk or cream, or a light

farinaceous pudding of rice, tapioca, sago, and the like, with bread and butter, and some simple form of preserve; or stewed apples or prunes, or very light plain cake, or a good bowl of nutritious broth with bread or crackers may be substituted for the porridge or pudding. It will sometimes be found best to serve this meal at seven o'clock or half-past seven; and, if hungry, the child may be given a slice of bread and butter and a cup of weak tea or coffee, mostly hot milk, at half-past five or six o'clock.

"Children need fat, but they do not digest meat fat well, as a rule, and are very apt to dislike it. They will often take suet pudding, however, when hot mutton fat wholly disagrees with them.

"Milk should be freely supplied, not only in the form of puddings and porridges, but as an occasional beverage, and *children should be made to understand that when hungry they can obtain a glass of milk, biscuit, or a bowl of bread and milk,* for the asking.

"Fresh fish, eggs and bacon are all wholesome and serviceable foods for children, and meat, as a rule, may be given twice a day, but not oftener. It may sometimes be advisable to give it but once a day when fish or eggs are supplied; it should, however, always be given at least once daily, and better twice to rapidly growing children. Large, strong boys require a great deal of meat, and its use should not be stinted. The larger boys may eat from seven to nine or even twelve ounces of cooked meat as a ration, although many

children may not require so much, the smaller boys doing well with from five to six ounces, and the older boys with from seven to eight ounces daily.

"During midwinter, when fresh vegetables are almost unobtainable in severe climates, vigorous boys are apt to have too much meat given them, and Yeo calls attention to the fact that eczema may be produced in them by a too exclusive animal diet.

"Overeating should be guarded against. The habit of slow eating should be insisted upon.

"It is well to allow children to play but moderately immediately after eating, and to require no mental work of them at such times.

"For some reason the diet in girls' schools is apt to be much less carefully regulated than in corresponding schools for boys. This applies not only in the United States, but it has been found the common experience in England and France; it is the more unfortunate, since girls, from their greater delicacy of constitution, especially during school age, require more careful nurture. Differences in habits and exercise and out-door recreation, no doubt, in part, are responsible for the comparative lack of proper development in some girls' schools as compared with boys', but this should be recognized and regulated with as much care as the diet.

"During the establishment of puberty it is best for children to avoid stimulating and highly seasoned food, and eating late at night. . . . Alcohol should be wholly forbidden."

The *British Medical Journal* says, in commenting on an article in the *St. James's Gazette*, on the question whether "parents underfeed their children," that "it is only too true that underfeeding prevails,—particularly in the girls' school; not the underfeeding of necessity, but the semi-starvation due to ignorance or meanness. The facts would be revealed at once, and the greatest benefit be conferred upon the life, health, happiness, and growth of children, if we could impress upon parents and teachers the value of scales and measure. Every age has its normal height and weight, and every season and every year its normal rate of growth. The diet may be inadequate in proportion to the work required to be done, especially where work is required before food, as in early morning lessons. . . . Insufficient care is taken at home, and still more at school, to provide an adequate variety in feeding. It is often the same, day after day, week after week, and year after year. The outcry against the feeding at schools, which arises from time to time, is frequently to be traced to this defect. Most of the causes of the underfeeding of children, both at home and at school, would disappear if the scales and measure were systematically resorted to, for they would instantly point out those children who were not thriving. Unnatural and unreasonable restraints would be removed by parents and teachers, if hindrances to growth were so palpably presented to them."

School Luncheons.—The editor of the well-known

household column in the Philadelphia *Ledger* discusses the question of school lunches in a thoroughly practical manner, and as the problem is an important one in connection with food for growing children, I will give you the salient points of her article.

She says: "So much attention is now being given to the scientific value of foods that no intelligent housekeeper needs to be reminded of the fact that age and occupation must be taken into consideration when preparing the daily menu for the members of her family.

"But the problem becomes an important one when we realize that upon the food of our children depends their healthful development, and that upon this depends, in a large measure, the future of the state.

"When we know that the right food, chemically considered, and not the most delicious or tempting, is the basis of all growth, mental as well as physical, the importance of the subject in regard to children becomes overwhelming.

"The majority of the children who are soon to be men and women, fathers and mothers, in their turn, is now being educated in our public schools, and threaded through and through the school communities are children who represent hundreds of thousands of homes where proper food is never thought of, and where such a matter as getting a given amount of nourishment for a given expenditure is never considered.

"Boston some years ago, turned its attention to these facts, and, as a matter of experiment, decided to assume

some control of the noon luncheons of the higher grade schools. It was hoped by this to improve the nutrition of the children, and indirectly to improve home conditions, where the need existed, by educating the boys and girls to a higher standard of living, cookery and cleanliness.

"Other cities, East and West, have watched the experiment with interest, and have offered the Hub the flattery of imitation more or less close, and in most of the higher schools are well in line for the new order of things."

The state of things in the Philadelphia Normal School for Girls is best described in a letter sent the Household by a woman in charge of the luncheons served there:

"We have demonstrated," she writes, "that the average school girl, in spite of the fact that she has been accused of a special predilection for pickles, pretzels, and sweets, does appreciate a wholesome, hygienic luncheon. A large basement room of the building has been fitted by the committee on the school with tables and stools and a long lunch counter at one end of the room. Other tables have been placed in the corridor in order to seat as many as possible, although the capacity is even now wholly inadequate. Another room with separate counters accommodates the pupils of the School of Practice.

"The success of the new arrangement has more than satisfied all the hopes of the committee of the faculty

who have the matter in charge. Quarter before twelve luncheon is ready, four attendants standing behind the counter, to serve the students as quickly as possible. About five hundred buy either a part or all of their luncheon.

"The menu each day consists of soup, cocoa, sandwiches, milk, fruits, rusk, biscuits and cakes of different kinds. The soup varies each day, as well as the sandwiches and cakes. Great care is given to keeping the soup and cocoa hot.

"During the warm weather ice cream was served every day; now it appears but twice a week. Whole wheat bread has been introduced, and is rapidly growing in favor. Believing in the old adage of the horse who couldn't be made to drink, the committee decided that some concessions must be made at first, and that only gradually would the more wholesome articles be given preference. That time is rapidly approaching. It is more often now that cakes are seen on the counter after lunch is over, where formerly it was sandwiches and fruit.

"Since many students bring a part of their lunches, the food purchased does not, of course, indicate altogether the quality of the luncheon actually eaten. Fifty sandwiches a day seem a small number to sell to so many, but probably most of the girls bring this substantial part of the lunch from home.

"It is the hope of those now serving the lunch to prepare hot dishes other than soup for the same price, in order to give as much variety as possible."

The committee on hygiene of the Boston School Board (*which committee, by the way, should be duplicated on every school board*) went a step further in securing an order to the effect that only such food as was approved by it should be sold in the city school houses. They then placed the task of supplying suitable lunches with the New England Kitchen (an institution somewhat similar to our College Settlement Kitchen), and although at first private funds were needed, the experiment soon proved its success by becoming self-supporting.

The beneficial effects of these simple, hearty luncheons on the mental vigor of the students and their appreciation of their value were practically shown during the school year and fully reported. A noticeable benefit was reported by the parents also.

The Household editor says, pertinently: "With all these favorable and encouraging results, why are these experiments not repeated in every one-session school in the country?

"Although our cities and towns do not yet admit, as those of the more paternal governments have done, that their responsibility for the children while in school includes the care of the body as well as of the mind, yet this responsibility is being somewhat recognized when the newest high-school buildings are planned with kitchen and lunch-rooms. But furnishing the equipment is but the first step in the right direction, and placing the work of supplying food in the hands of any one individual is but the second. Even should the

city or town assume the financial responsibility of these luncheons, the plans would be incomplete without some one to set a standard of quality and cleanliness, to insist that the food must be not only attractive, but of good nutritive value, suitable for the children and served in proper fashion. Some one, too, must have strength of mind to stand firm for the principles involved, even if the boys 'go on a pie strike,' as happened in a neighboring city, or if the bakeshop around the corner hangs up a sign that reads 'Here you can get what you want, and not what the city says you must have.'

"And the educational side is not the least of the work, while the mothers still ask, 'Why are you not willing to selling pies?'

"The lunch may be sent, as in Boston, from one central station, or it may be largely prepared in the school kitchen. Each method has been successfully tried, and each has its own special advantages; but under either or any condition, the essential point is the maintenance of a high standard of cleanliness and quality by *some one with a broader point of view than is possible to the person who comes directly in contact with the children at the lunch counter.*

"*Is there any doubt that a broad-minded educated woman is the one best fitted to hold that standard for the community, or that this work is worthy of her efforts?*

"It may seem prosaic, and it will be full of petty details, but it has its inspiring side also in the consciousness that it may bring an influence of far-reaching effect

on the physical and, consequently, mental and moral vigor of the men and women of the coming generation."

Professor Dutton, in response to a personal request for the same, writes in regard to this question as follows:

"The lunch room becomes at once a central factor in any well-conducted school. Its importance is increased by the fact that the breakfast is often too hastily eaten, and hence is insufficient to sustain the child during the entire morning.

"The Horace Mann School is equipped with a lunch room large enough to seat three hundred pupils at tables. Connected with it is an ample kitchen equipped with the necessary steam tables, ranges, urns, etc., for keeping food hot. The children in the elementary school occupy the lunch room from 11.30 A.M. to 12 M.; the high school pupils from 12.15 to 1 P.M.; and after that the students of Teachers' College are admitted. It is under the same general management as the Columbia University lunch room, and while the ideal has probably never been reached in such matters, the dietaries provided are nutritious and wholesome. Many pupils prefer to bring from home a portion of their lunch, as, for example, a sandwich or bread and butter, and to supplement this with a cup of hot soup or bouillon, with, perhaps, a cup of cocoa or a glass of milk. As the pupils enter the lunch room each one takes a tray, and, passing along in front of the counter, takes what he desires, and pays for it at the cashier's desk. The only thing needed is to

secure greater perfection in the selection and preparation of the daily menu. A committee, consisting of the teachers, college physician, and the principals of the high and elementary schools, have this matter in charge, and is working in co-operation with the caterer.

"The health of the pupils is singularly good, and the success of the school in its various athletic enterprises is marked. Doubtless, some of the credit for this should be awarded the lunch room. The large expense devoted to this feature of the school is only a recognition of the principle, now so well established, that physical health transcends all other considerations in the rearing of children, and that a school must manage its affairs with this idea in view."

The growing interest felt now throughout the country in the subject of the food and nutrition of man brings about the question: What place should this work take in the schools, and to what extent can it be introduced?

In presenting the history of the movement that brought the teaching of cooking into the public schools of New York City (see Government Bulletin No. 56, United States Department of Agriculture), I endeavored to show the pedagogical as well as the practical value of this branch of manual training. Dr. True, director of the office of experiment stations, says, in regard to the subject of instruction in cooking, that this branch of manual training, as introduced into public and private schools, is steadily increasing in the favor of many

school officers and of the people who support and patronize the schools. It has been found possible to adjust the relations of the practical exercises to the general educational features, so as to maintain the interest of pupils in the mere routine processes of education, but at the same time to *furnish them with some degree of practical skill and knowledge of direct utility to them in the various industries on which the livelihood of the masses of our population depend.*

Much of this work has been done in co-operation with social settlements; special effort has been made in the attempt to acquaint the public with the practical results of such work, and such reports show the necessity of a more thorough training, *from a broad standpoint*, of teachers of domestic science. They also show to those who are vitally interested in the progress of common schools in country districts something of the organized effort which is being made to *adapt the course of instruction in our city schools to the actual needs of the children.*

Would it not be possible for the hygiene committees of school boards to correlate the cooking school attached with the school lunch question? Would it not be possible for cooking classes to be held at such an hour as to make it practicable to prepare the luncheons needed for the children, thus centralizing effort, and not only utilize the pedagogical and utilitarian value of such training, but also keep in view the economical aspect, while providing the children with what, of necessity, would prove of immense

benefit when considered from every standpoint? Such concerted work in the schools could be made to reach out and meet the efforts toward practical issues that are being made by associations like the Home Improvement Club, which is meant to improve the east side homes in New York; the Household Economic Association, which does good work in the tenement districts in New York through its classes for teaching cooking; the Hartley House work and other similar efforts made throughout the United States, notably that of Henry Tibbits in Chicago.

Professor Dutton writes also in regard to school gardens and their corollary, home science teaching, as follows:

"Happy is the child born and nurtured in the country, where grass and flowers are his ordinary companions; where in field and forest he sees all kinds of life, and is daily learning from Mother Nature the rich and subtle lesson she has to teach.

"How difficult in town and city to make up this loss to children whose environment is a dreary waste of paved streets and houses of brick and stone. A box in the window or an occasional bouquet of flowers from the greenhouse is but a poor substitute for the grand out-of-doors which the country child enjoys.

"Surely, a people so wealthy, so intelligent, and so generous, will soon devise some means of permitting our city children to experience and enjoy Nature in her larger and more health-giving phases. The school garden is likely to become here, as it already has in Europe, a fea-

ture of early school life. In many of our larger towns and cities it is perfectly feasible to secure vacant lots of land at small expense for this purpose. In New York the problem seems more difficult. With the transit facilities promised for the near future, it may become possible to institute weekly or bi-weekly half-days in the country for the boys and girls who are old enough to go, under the direction of their teachers. Large tracts of land should be leased or bought on Long Island, in New Jersey, or in Connecticut, for school gardens. These gardens should be in charge of competent persons. The planting should be widely differentiated, the simpler work being done by the younger children, and the more difficult and complex by the older. For such municipal effort for the betterment of children, trolly cars should be free. The vacation school problem would then be largely simplified, and its value greatly enhanced. Nature study would become *real* and not *artificial.* The child of the tenement house would know the world of his ancestors, and would have his choice of life's opportunities greatly widened.

"It is safe to predict that leading the growth of our cities out to Nature and up to Nature's God will tend to promote health and happiness, and will lessen discomfort and crime."

Unification of effort and systematic basic work in school conditions could easily bring about such a consummation, and every thinking person must certainly concede the necessity for such unification.

When facing difficulties such as are already granted to exist in present food conditions of school children, we must find the quickest and easiest way out of difficulty in order to achieve results. Theory must be instantly reduced to practice; the lack of this is one of the crying evils of to-day in the study of home science, and a word of caution might well be extended to those teachers of domestic science who fail to keep the ends in view, the material they are dealing with, the means at hand, the conditions and fluctuations, the proper selection of means and the proper application of means.

Recipes.

Broths and Soups.

The first point to impress well upon the mind in making broths and soups is that good material must be used, and that the meat must be treated in such a manner as to extract the nutritious juices. This cannot be done by using hot or boiling water, which, incredible as it may seem to those who know better, is frequently done. Cold salted water must be used, and the meat should be allowed to soak in the water for several hours before it is subjected to heat. Even then it should only simmer (not exceeding 160° F.). At the last it may be boiled for one or two hours to dissolve the gelatin of the bones, etc., if they are used; but this is not necessary, as chopped lean meat is preferable for nursery use, and a continued low temperature without boiling will pro-

duce a very nutritious broth. The time for simmering may be regulated by the requirements of the household, the minimum time being two hours. If the broth is to be used the same day, it is well to have the meat delivered at an early hour, as this will allow ample time for the entire process before the hour of noon-day dinner, using ice for cooling and skimming, which must be carefully done. It is preferable, however, to have it made the day previous, as then every particle of fat can be removed. Fat plays a very important part in children's diet, but it is not to be served floating upon poorly made soups. The greatest care should be exercised in this direction.

Chopped lean beef or mutton (from the neck preferably), a half-pound daily, with one pint of water, different vegetable seasonings, with a little veal added to the broth occasionally, should give sufficient variety, with the addition of milk and chicken broths, for all requirements. Yet if, for any reason, it is desirable to have something different, there are many well-recommended recipes from which to select. For children over fourteen months of age, rice, tapioca, barley or sago may be added to beef or mutton broth, half a tablespoonful to the pint, but it must be thoroughly cooked. Different vegetables may be added later in the same way, to give variety for children over two and a half years old, spinach, celery, onions, and cauliflower being especially useful from a dietetic standpoint. Macaroni in its various forms may also be

used as an addition, and makes a pleasant change. If, in making broths, the measure given is reduced by cooking, add sufficient water to keep to its original quantity. When using parsley for seasoning, do not mince it in the usual way. Children will frequently object to it, and by using a bunch uncut the same result will be attained. This applies as well to celery, spinach, cauliflower, and onions. Children have been educated to eat these vegetables without any trouble beyond first introducing them into some favorite soup, not using too much at first, and having even that pressed through a purée sieve, gradually increasing the quantity until the taste is acquired. This is not always necessary, as in some instances the little ones take kindly to and enjoy them from the first. The suggestion is given for those mothers who find difficulty in getting children of three or four to eat juicy vegetables, which are an important adjunct to nursery fare. Dr. Yale says,* "The value of these vegetables is not so much from their nutritiousness, which is not very high, as because of the salts they contain, and because they are palatable to many. By reason of the salts, they are useful as preventives of scurvy, a disease, however, not common in childhood, except when the diet has been particularly restricted. They should all be very thoroughly cooked, and if passed through a purèe sieve will generally agree. But for some diges-

* Nursery Problems.

tions, the flatulent tendency of the onions and cauliflower cannot be gotten rid of even in this way."

Cooks should be instructed to save all the water in which these vegetables have been boiled (taking it for granted that they have previously been properly washed), as there is nothing more delicious to add to stock than these flavored waters. They can also be utilized in making milk broth, which is nutritious as well as stimulating. Many an adult who dislikes milk, hot or cold, would be surprised, were he to try it, to find how palatable a well-seasoned hot milk broth can be, and how quickly it drives away that tired feeling, which is the natural result of a busy day.

In making broths or soups, use agate, porcelain, or earthenware; tin utensils give a bitter taste. A close cover is also necessary, to prevent evaporation and to keep out the dust.

The following recipe, given for a nutritious beef broth, will prove a comfort to busy mothers, as children rarely tire of it, and it can be made in quantity, keeping perfectly in a cool place. There is then very little labor connected with this portion of the dinner to be prepared daily, beyond changing the seasoning from day to day. Another point in its favor is that it may be taken from a cup or glass; consequently the busy mother is free to attend to the remainder of the dinner, or to take a moment's rest while the little ones are enjoying their broth. Young children are generally

better able to handle a cup or glass carefully than a spoon. These things may appear trifling to many, but a little rest is a priceless boon to a tired mother, who too often pays little attention to her own requirements in any direction.

Beef Broth.—The materials needed are chopped lean beef, cold salted water, in the proportion of a pound of meat to a quart of water for children two and three years of age, and a pint of water and one large onion cut into pieces for children over three. Soak the meat, and onion, if used, in cold water for two hours at least (six is better) in the vessel in which it is to be cooked, keeping it on ice or in a cool place during this time. Then set it upon the back of the range, or, if it is to be made upon a gas, alcohol or oil stove, use a double boiler, and keep the heat moderate by regulating the flame. Keep the vessel covered, and allow the broth to simmer, keeping up the original quantity of water for three hours at least. Let it cool overnight, remove the fat in the morning, and keep covered in a cool place until needed. If this is done, and the entire quantity is reheated to the boiling-point every time that some of it is used, it can be kept in winter for several days.

The variety of seasoning should be considered when preparing the dinner for the general household, as labor is thus economized. For instance, if spinach is to be cooked for late dinner, a portion of it pressed through a purée sieve, with some of the water in which it was

boiled, should be saved for the children's broth next day, care being taken to have it put on ice in china, glass, or agate, closely covered. (Spinach, to be delicate, must be boiled rapidly in a large quantity of water.) There will be no danger of the little ones growing tired of an endless succession of plain meat broths, if the vegetables allowable are used in this way for variety.

Alternate the above for children over three years of age with any of the following soups, as they may fill in with the general household cooking; but it is advisable to have the beef broth on hand at all times, to be provided for emergencies.

Milk Soup.—Ingredients required: One pint of milk, one quart of boiling water, two onions, salt, a teaspoonful of butter, one heaping teaspoonful of flour.

Boil the onions tender, and press through a purée sieve into the water in which they were boiled, using an agate saucepan, adding sufficient boiling water to make a quart. Season with salt, add the milk, rub the butter and flour together, and stir into the soup, bringing it to the boiling-point, stirring all the time. Serve hot, as a tepid milk soup is abominable. By the time the children are ready to take it the temperature will be about right. This soup may be varied in endless ways with the vegetable waters indicated above, or with vegetables, chopped oysters, chicken jelly, etc.

Chicken Broth.—Cut up a fowl (not a young chicken) into small pieces, rejecting the fat and skin unless the latter is white and tender, cover with cold

water, and simmer gently for six hours. Cool overnight, and remove the fat. A four-pound chicken will make two quarts of broth. A little gelatin dissolved in every cupful is useful in cases of convalescence, especially during digestive difficulties, and it may be used generally in the nursery. The broth may also be thickened with corn starch, flour, or arrowroot.

Chicken milk is a particularly delicate preparation, and can be made readily from the above if the broth has jellied. If not, it must be further reduced. Put in a saucepan a stalk of white celery and a stalk (not cut) of parsely with a little salt, add a pint of the chicken jelly with some of the meat, and boil until it falls from the bones. Strain and add the same quantity of fresh milk, presupposing that the pint of chicken broth has been kept intact. Bring this to the boiling-point several times and strain into a cup. This is very nutritious, and forms a slight variety. (Trained Nurse.)

Barley Broth.—Take the best end of a neck of mutton or lamb, cover with two quarts of cold water, and add a teacupful of crushed barley. Let it stand upon the back of a hot range for an hour, then move it forward, adding at this time the vegetables desired, cut into small pieces, and let it simmer for five hours.

Cool overnight. Skim and season with salt. It is almost impossible to skim mutton broth thoroughly unless it has stood overnight. Any one trying to do so will be easily convinced of the truth of this statement.

Beef Juice.—Remove all fat and tissue from a half-

pound of lean beef; broil over a clear fire from six to eight minutes; cut the meat into small pieces, and squeeze out the juice with a meat-press or lemon-squeezer. Add salt. When warming, put the juice into a cup and set it in hot water, that it may not coagulate, as it will do if heated in the ordinary manner.

Beef Essence.—Put one pound of chopped lean beef, with a little salt, in a glass fruit-jar, and see that the cover is tight. Place it in the oven in a pan of water or in an ordinary steamer and cook four or five hours. Strain the essence through a very coarse strainer.

Beef or Mutton Tea.—This recipe is adapted from Burnet, and is efficacious in cases of anæmia. One pound of chopped beef or one and one-half pounds of lean mutton (chopped); no gristle or fat; ten drops of hydrochloric acid, and a pint of water. Put the beef and acid in the water, and keep it covered in a cool place for at least six hours, or overnight if possible. Simmer for two hours, strain, and salt. Remove all fat when cool. It may be used cold, or, if desired, it may be heated in a cup in warm water.

Veal Broth.—Veal broth is nutritious, and is the only form in which to use veal in the nursery. Use one-half pound of minced lean veal to one pint of salted cold water. Let it stand four hours, then simmer slowly (it should not reach the boiling-point) for two hours, strain through a coarse sieve, and skim when cool.

Mutton and Veal Broth.—Use one pound of meat, half mutton and half veal, to a pint of cold salted

water, and proceed as above. Barley or rice may be added, a tablespoonful of either, well boiled. Milk thickened with flour is a pleasant addition to the above or to plain mutton broth.

Chicken Broth.—Cut up a chicken, bones and all, into small pieces, put them over the fire in cold water, add a little salt, and simmer for six hours. Cool, remove the fat, and keep the jelly covered in a cool place. This yields a very strengthening soup, which may be made the base of many a delicate dish for children or invalids, and is desirable for school luncheons.

Chicken Custard.—Use chicken broth instead of milk, with beaten eggs, in the same manner as when making cup custard, seasoning with salt instead of sugar. Serve cold or warm, with or without thickened chicken broth.

Burnet strongly advises the thickening of broths with arrowroot, boiled flour, etc. They may also be thickened with gelatin. Chicken broth is especially nice when done in this way. It should frequently be done for school children.

Milk Soup.—One cupful of potatoes mashed and seasoned with salt. The yolk of two hard-boiled eggs, creamed with quarter of a cup of butter; one quart of milk brought just to boiling point, but not boiled. Stir into this one large tablespoonful of flour; stir quickly to avoid lumps; strain, and then serve in very hot, pretty little soup bowls for children's noonday dinner.

Oyster Broth.—Chop six fresh oysters and heat them in an agate saucepan, letting the liquor which exudes from the oysters come to a boil. Add a very little hot water, season, and serve after straining. This is very nice with buttered crackers.

Clam Broth.—1. Put a few well-washed clams in a clean pan in a hot oven, or in a steamer over a hot fire. When they open, drain off the liquor and add an equal quantity of hot water. Season to taste and thicken with grated cracker, if desired, or serve plain with buttered crackers.

2. Take about a half a dozen or more clams, save and add the juice, remove objectionable parts from the clams, and cut them in small pieces; add half-pint of cold water, let them boil slowly for ten minutes, strain, and season with pepper and salt, and a little butter and milk if you like.

Potato Soup.—Peel one dozen potatoes and one onion and cut them into small pieces. Cook them tender in a quart and pint of beef-stock, plain water, or vegetable water, and rub the potato through a purée sieve. Add salt and a half-pint of hot cream. Beat lightly, and serve with bits of zwieback or dry toasted bread broken into small bits into the soup plate.

Savory Jelly. (Adapted from Burnet).—Take half a chicken, one pound of neck of veal, one pound of lean beef (from under the shoulder is the best part for beef tea, etc.). Separate the joints of the chicken, then cut all the meat—beef, veal and chicken—into very

small pieces; put the whole into an earthen covered vessel with two quarts of water and enough salt to season; stew gently in the oven for five or six hours; skim, strain, and keep cool. This is a very nutritious jelly.

Roast Beef Gravy.—The thick brown essence in the pan, called ozmazome, should be dissolved in a little water after the fat has been poured off. It may then be thickened and seasoned in the usual manner. Gravy made from meats fried in fat in the ordinary way must not be used for children.

A Home-Made Meat Powder.—Dr. W. R. Huggard (*Muenchener Medicinische Wochenschrift*) gives a convenient method of preparing a powder from meat to be used as a nutrient. Lean meat is cut into small pieces; these are dipped into boiling fat for a few minutes, until the surface is browned, then taken out and drained on a sieve. They are then cut into fine pieces and dried in an oven for twenty-four hours with a slow fire. The meat thereby becomes dry and brittle, and may be easily ground in a coffee-mill. By this process of roasting it has lost four-fifths of its weight. This meat powder has a pleasant taste, and may be used in various ways, as in hot water, mixed with mashed potato, on bread and butter, as a sandwich, in soup, milk broths, etc. It is very easily digested, is tolerated by the most delicate stomach, and may be kept for a long time if dry and excluded from the air.

Egg Custards Without Milk.—*Ingredients required.*—Four eggs, two tablespoonfuls of sugar, the

juice of an orange or a lemon, or a teaspoonful of vanilla.

Beat the yolks well with the sugar, and pour them into a double boiler. Stir over the fire until the mixture thickens, then add the flavoring and the whites of the eggs, which should have been previously beaten to a froth. Stir a few minutes longer, and pour into a mould and cool. These custards may be made also with salt, meat juice, celery or chicken broth, for a pleasant variation. Inasmuch as there is always great demand for new dishes that are not sweet, it may be well to remember that this plan may be followed with tapioca, sago, rice, and many other farinaceous foods that are generally used in sweet pudding if used at all. It requires very little originality to make a palatable and wholesome dish of any of the above-mentioned articles without following the stereotyped plan of sweetening and flavoring. The following recipe is an illustration of this method:

Tapioca with Chicken or Meat Jelly.—Wash one-half cup of tapioca, and put it into a double boiler with one-half cup of cold water. Let it absorb the water, then add a pint of chicken broth, milk jelly, or any meat infusion, and cook until the tapioca is soft and clear. Season with salt, and mould. Serve hot or cold as preferred. For another change, a well-beaten egg may be stirred into the tapioca when it is taken from the fire. These moulds are very appetizing when served with a little of the same broth or essence that

has been used in making the jelly, if thickened and daintily seasoned.

A Recipe for Invalids Direct from Dr. S. Weir Mitchell.—For about a pint of good, rich milk, take one good, fresh egg (if you can get it); while the milk is heating to the boiling point heat the egg in a good-sized bowl very lightly (yolk and white together); pour the boiling milk into the egg, stirring all the time to insure a smooth custard; add a bit of salt, with sugar and nutmeg and brandy, if you like it and need it. The milk is said in this way to cook the egg just enough to render it digestible. We have known and used this recipe in oft-repeated sickness, as well as in health, and can testify to its worth.—*Public Ledger.*

A Savory Breakfast Custard.—Fill a custard cup lightly with bread crumbs, and, if convenient, add a little minced chicken. It is equally good without. Beat an egg, add a little meat, season, and pour the mixture into the cup over the crumbs. Bake in the oven in a pan of hot water for but a few minutes, as eggs must be but lightly cooked to be digestible.

Poached Eggs.—To poach eggs, drop them in steaming water that has just stopped boiling, having added sufficient salt to taste before putting the water on to boil. Set the water containing the eggs back upon the stove. From five to eight minutes will cook them sufficiently. Eggs poached in this way and served on toast are further improved by the addition of chicken broth slightly thickened.

Cereals.

The following cereals are all suitable for nursery use: granulated or crushed wheat, which is an all-year-round food, possessing no fat, and requiring cream to make it a perfect winter food; cornmeal, a winter food, which builds up strong tissues and is useful in constipation; purified or cooked gluten, the latter of which is always ready for use; oat flour, from which a delicious blanc-mange can be made; crushed barley, which, when properly cooked in milk or water, is an easily digested nursery food, and when mixed with gluten, half and half, stirred into cold water, and afterwards well cooked, is extremely palatable; farina, which, when subjected to high heat in preparation, becomes a desirable and nutritious food, used either as a gruel, a porridge, or in desserts.

The list of cereal preparations to be found for sale is endless, but one need not go far to find a few perfectly prepared foods of this class that are assimilable when properly cooked, and which will supply the needs of growing children in variety as well as in constituents. Being heat-producers, they should be used carefully in warm weather; white hominy, rice, gluten, barley, rye and wheat preparations are the most desirable, as they possess little or no fat.

Oatmeal Gruel.—Four tablespoonfuls of rolled oats, one-half teaspoonful of salt, one teaspoonful of sugar (if directed by the physician), two cupfuls of

boiling water, two cupfuls of hot milk (or four cupfuls of water and no milk). Pour the boiling water on the oatmeal, salt and sugar, if used, and cook in a double boiler for three hours, or cook in an agate saucepan for one hour, stirring frequently, if a saucepan is used, and adding water to the original quantity. Strain to remove the hulls, and add the hot milk, bringing all to the boiling point. If no milk is used, add all the water in the beginning.

Two tablespoonfuls of oatmeal and two of Graham flour, with salt, a pint of water, and a quart of milk, make a pleasant change in gruels. Cook the water, salt and meal, for one hour in a double boiler or steamer; then add a quart of milk, and scald or steam, according to the vessel used, for a few minutes only. Strain and keep cool.

If gruels are to be malted they need not be cooked so long as for ordinary use. One hour in a double boiler, or half an hour in a saucepan, is sufficient.

Barley Gruel may be made in the same way as oatmeal gruel, using barley that has been ground fine in a coffee-mill.

Farina Gruel is made in the proportion of two tablespoonfuls of farina to two cupfuls of water and two of milk, with salt to season; but it does not need long cooking, as it is partly prepared. Half an hour is enough for the whole process.

Cream Gruel.—For cream gruel take two-thirds of a pint of milk and one-third of real cream; the milk

must be new; boil these together. If cream will not stand the test of scaldling it is not fit for use; rub a tablespoonful of sifted flour to a smooth paste in a little cold milk, stir in, and let boil two or three minutes. Add a mite of salt, with sugar and wine, or brandy, if desired.

Browned Flour Gruel.—This can be made by same rule as the above, leaving out cream, though it is better with it. To brown the flour, take a clean cast-iron pan, as it is thicker and less liable to burn than the ordinary pan, put in about a pint of sifted wheat flour, or less, if you are not used to the work; begin stirring with an old spoon as soon as it is hot, and continue slowly, being careful to have it a nice chestnut brown when done. This can be bottled and kept for weeks. Use as much as will make it as thick as ordinary gruel. The best medical authorities recommend it highly for nutrition and digestion, being especially useful in summer diseases of stomach and bowels.

Arrowroot Gruel.—One tablespoonful of arrowroot, one-half teaspoonful of salt, one cupful of milk. Wet the arrowroot with a little cold water, add a cupful of boiling water, and boil ten minutes; then add the milk and bring again to the boiling point. Strain and keep cool.

Malted Gruel. (Adapted from Thompson.)—Gruel should be well boiled and kept free from lumps, using a strainer if necessary. When cool enough to swallow, add a tablespoonful of malt extract to a pint

of gruel. In a few minutes the gruel will become thin from the conversion of the starch into maltose. All farinaceous foods can be treated in this way.

Oatmeal Porridge.—Three tablespoonfuls of rolled, ground or crushed oats, one pint of boiling water, one-quarter teaspoonful of salt. Steam for two hours or longer in a double boiler.

Oatmeal porridge is very appetizing when served cold in mould shapes, and it will frequently be eaten in this way when it would be refused if served in any other form. Variations may be made by using farina, cracked wheat, browned rice (browned in the oven before steaming and moulding), hominy, arrowroot, etc., giving further change for older children by serving occasionally with fruit juice instead of cream or milk.

Wheat Porridge requires two tablespoonfuls of wheat to a pint of salted water, and it should be thoroughly boiled or steamed in a double boiler, two hours being the shortest time to be allowed for the cooking of any porridge.

Hominy requires the same proportions, and should be cooked for the same length of time.

Cornmeal Mush (to be used warm or moulded, for supper or breakfast, with milk or a little good syrup) should be cooked very carefully in a double boiler or steamer for the time given for the cooking of all cereal porridges, and it should be free from lumps when done. A very good plan to follow when cooking cornmeal or bran mush is to sprinkle the meal into

a saucepan of boiling water from a fine sifter, stirring all the time, before putting it into the steamer, as freedom from lumps depends upon the even admixture of the water and the meal.

Farina Porridge requires three tablespoonfuls of farina to a pint of hot salted water, and should be cooked at least an hour in the steamer or double boiler.

Oatmeal Blancmange.—Put one pint of water and half a teaspoonful of salt into the upper part of a double boiler, and, when the water begins to boil, sprinkle into it a scant teacupful of rolled oats; let boil briskly for two or three minutes, and then let it steam for five or six hours. Strain through a fine soup strainer, leaving all the husks behind; then stir into it one-half a pint of scalded milk. Add white sugar to taste, stir over the fire for a few minutes, flavor with vanilla extract, put into cold, wet moulds, and set on the ice or a very cold place to harden. Serve with cream. Two whipped eggs can be added if desired before turning the mixture into the moulds.

This is a very nice pudding to give to an invalid.

Oat Jelly. (Rotch.)—Four ounces of coarse oatmeal are allowed to soak in a quart of cold water for twelve hours. The mixture is then boiled down so as to make a pint, and is strained through a fine cloth while it is hot. When it cools a jelly is formed, which is to kept on ice until needed. Different proportions of this jelly can be used, but usually it is best to begin with equal parts of jelly and cow's milk. When

needed, this mixture is warmed and a little salt is added.

Muffins, Bread, etc.

Cream Muffins.—To make one dozen, beat up one egg very light; mix it with four tablespoonfuls of rich sweet cream, a little salt, and a scant half-cupful of milk. Sift in slowly one and a quarter cupfuls of whole-meal flour and two teaspoonfuls of a well-selected baking-powder. Bake in a very quick oven (about fifteen minutes should suffice), putting very little batter into each muffin-pan, that the muffins may puff up and be nearly all crust, as they should undoubtedly be for the children's table.

Graham and Cornmeal Muffins may be made in the same way, using Graham or corn flour in the place of whole-meal flour.

Cornmeal Muffins are delicious when made with half cornmeal and half hominy (breakfast hominy, well cooked). Stir a teaspoonful of sweet butter into three-quarters of a cup of hot hominy; add the egg, salt, cream and milk; then stir in three-quarters of a cupful of corn flour and the baking-powder, and bake as directed above, remembering to keep the mixture of a consistency to pour easily, as in this way the muffins will be light and crusty, instead of heavy and indigestible.

Cornmeal Mush.—Cornmeal is not used nearly as much as it should be in the homes where there are young children. It is very wholesome for any one, young

or old; and children often like it at breakfast, with cream.

To make cornmeal mush, take a pint of cornmeal mixed with a pint of milk and a teaspoonful of salt; put this into nearly a quart of boiling water, let it boil half an hour or longer, stirring often. Cook in a double boiler or a boiler with a copper bottom.

Bread.—Well-made home-made bread is infinitely preferable to ordinary baker's bread. It should be at least one day old, and should be thoroughly baked.

The gluten advised above absorbs more water than ordinary starchy flours, and needs less yeast. Brewer's yeast, which gives a good flavor on account of the hops used, or good home-made yeast, is not undesirable, but in these busy days no one need hesitate to save time and trouble by using the commercial compressed yeast of deservedly good repute, as it answers every purpose. Heated milk may be used for mixing instead of water, if preferred, but a very good bread may be made very easily, as follows, according to a recipe given by a cook who learned her art in Ireland. Her method reverses the usual directions in regard to the temperature of the oven, which, judging from the delicious results, is a very sensible procedure. The ease with which the bread is made will commend it to the busy housewife. Begin in the morning:

Flour, three quarts, sifted in a large bowl;
Salt, two heaping tablespoonfuls;
Sugar, four heaping tablespoonfuls;

Water, or milk and water, two quarts, lukewarm;
Yeast, one cake;
Lard, three heaping tablespoonfuls.

Put the salt, sugar and lard into the flour, and rub the lard fine by crumbling it lightly between the hands. Use warmed flour, especially in winter. Flour should always be warm, for best results in baking. A good plan is to keep constantly on hand near the fire a bag or covered pan of well-dried flour for bread, cake, or biscuit. Dissolve the yeast in the warm water, and pour it over the flour, mixing with the hands; then sift in gradually a quart or more of flour, adding until the dough can be turned out on the board. Knead lightly from ten to fifteen minutes, adding flour until the loaf does not stick to the board. Put it back in the bowl, cover lightly, and let it rise in a temperature of about 75° F. for three hours. Cut into loaves and put into buttered pans, letting them rise on the rack above the range, or in a place of equal temperature, for half an hour, when they will be ready to be placed in a moderately quick oven. After half an hour, as the bread rises in the oven, increase the heat slowly to the end of the time required to bake the loaves. The time to be allowed for baking an average-sized loaf is one and a quarter hours. The usual plan in baking bread is to begin with a temperature of 400° F., gradually lowering to 250° F., with the frequent result of a loaf of bread that is soggy in the inside and very hard on the outside. In the above method the reverse is the

case. The result should be dry, well-baked, evenly browned loaves of bread, that still retain enough moisture to keep them as they should be.

The use of bread made from the whole grain meal should be encouraged for children, for the following reasons: they must be restricted in a meat diet, therefore such bread supplies a much-needed addition; it contains forty instead of twenty per cent. of gluten, and contains twice as large a proportion of certain salts —chiefly phosphates—as white bread; it contains also the laxative fatty matter upon which great dependence is placed when arranging a dietary for children.

Points to remember in buying flour and baking bread are that a good bread flour does not cake in the hand when squeezed, that kneading must be done lightly, to keep the bread porous, and that the temperature for the rising of the sponge should be from 70° to 80° F., not higher.

The use of bread may begin in the nursery as early as twelve months, if a sufficient number of teeth are present, which should be the case at this age. Dr. Rotch says, "Good butter on the bread may usually be allowed at sixteen months."

In some form, at the ages indicated, bread or biscuit should be given at each meal,—*i.e.*, stale bread or crust of French bread, zwieback, toast, and Graham bread, or soda, oatmeal, Graham, gluten, or educator biscuit. These are all permissible when they can be chewed thoroughly. Oatmeal and Graham biscuit belong to

laxative foods, and should be used accordingly. Jerome Walker, M.D., pertinently says, in regard to this subject,* that "probably, with the exception of candy, no article that is eaten is so much abused as the animal-cracker. Before these crackers were introduced children were content with a few butter, soda, milk, or even ordinary sweet crackers at one time, but now the child is anxious to eat a number of animals. The cracker-maker, detecting this propensity in children, furnishes a wonderful assortment of animals, and the child is eager to eat one, at least, of each kind purchased. The mother thinks these animals are so nice for the children to play with that frequently she sends out for a half-pound or a pound, and she often gives all to the child to keep him quiet as he is trundled along in his carriage. What is the consequence of so much sugar and starch? It perverts the appetite, teaches the child to reject soups, broths, bread and butter, and milk, and to prefer sweets and pastries, and also induces starchy dyspepsia."

The use of zwieback (twice-baked bread) can be thoroughly recommended. It possesses the advantage of being more easily digested than ordinary bread on account of the complete conversion of the starch into dextrine as the result of the double baking.

The following recipe may be used for zwieback, for a change from that made from ordinary home-made bread:

---

* Babyhood.

Moravian Cake.—This is best when started in the morning, unless the last rising can be attended to very early in the morning. If this can he done, set the sponge about five o'clock in the evening, using one cup of potatoes mashed in one cup of the water in which they were boiled, one cup of sugar, one-half cake of yeast dissolved in a little warm water, with flour enough to make a thick batter. Cover and keep in a warm place (about 80° F.); beat occasionally during the evening, and at ten or eleven o'clock mix in the batter one cup of sugar, three eggs, and three-quarters of a cup of lard and butter, a pinch of cinnamon, and enough flour to stiffen, kneading it well into a dough that will not stick to the sides of the bowl. Leave it well covered, in a temperature of 70° to 75° F., until early in the morning, shape into loaves or any form desired, let rise for half an hour, spread the cake with a sauce made of a cup of sugar, one tablespoonful of hot water, a small piece of butter, and enough cinnamon to darken the sauce, and bake in a moderate oven.

The above may be used as sweet bread, cake or toast. By cutting it into thin slices, buttering it lightly, and browning delicately in the oven, you have a delicious change for the frequently stereotyped nursery menu.

A word of caution should be heeded when making toast. It should be done in such a manner as to dry it thoroughly in the middle before browning takes place. Soggy, quickly made toast is decidedly not allowable in the nursery.

A simple sponge or tea cake may be used occasionally, when given with moderation to children over five, either in the form of lady-fingers, or as the ordinary sponge or tea cake made by the average cook. It must be well baked, not fresh, and should be just as light and porous as good bread should be, not notably moist, nor rich, nor full of fruit.

Meats.—The best portions of beef for nursery use are from the loin for broiling, and from the neck, rump, or first and second cut of the round for other uses, which will be indicated. This selection is independent of joints for roasting or boiling. Either a sirloin, porter-house, or tenderloin steak is most suitable for broiling, and it should be cut from one to two inches thick—two inches is better—to keep the meat juicy. Trim off the fat, wipe with a clean damp cloth, placed in a heated wire broiler which has been greased to prevent sticking, and hold directly over a glowing bed of coals. A live fire is necessary, not one that has begun to cool. The steak should be turned five or six times during the first minute, that the outer sealing may be quickly done; then the broiler must be held farther away, and the meat finished more slowly, turning at this stage once every half miuute until the meat is done. It should be pink and juicy inside, but not raw. Seven to ten minutes over a good fire will usually cook to perfection a steak from an inch and a half to two inches thick. Have the plate upon which it is to be served warm (not hot), season the meat with salt, and use care in handling it

that the surface may not be broken and the juice lost. For nursery use, salt is the only condiment allowable. Never use melted butter on the meat; all the butter required by children should be taken as cold as possible upon the bread that is eaten, not upon meat or vegetables (except in cream sauce, as indicated elsewhere), if freedom from indigestion is desired. When broiling thin steaks, or a tenderloin which may not be very juicy or of good flavor, it is a good plan to lay a thin piece of round steak upon both sides of the tenderloin before broiling, and thus get a delicious steak, discarding the outer pieces, the juice of which has entered the middle steak.

Cooked scraped beef makes an acceptable change, or raw, when allowed by the family physician, and it may be used at an earlier age than meat is usually given. Use a thick cut from the tender part of the round or rump, scrape off the pulp with a silver knife, rejecting the tough fibre, and mould it into cakes about an inch thick; then broil on an oyster broiler as you would an ordinary steak. When for any reason it is inconvenient or impossible to broil a steak or scraped meat, heat thoroughly a thick iron or steel pan, sprinkle salt over it to prevent sticking, and cook the meat in the same manner as if using a solid broiler, turning with a knife or spoon, not a fork, that no juice may escape. Turn quickly at first and have the pan scorching hot, then moderate the heat, and finish more slowly. Very good results may be obtained in this way. Do not put fat into the pan, as is so frequently done.

The above directions apply as well to the broiling or panning of lamb- and mutton-chops, which should be cut thick and be well trimmed. It requires from four to six minutes to cook a chop one inch thick.

Boiled Meats.—When boiled meat is desired, use water that is boiling rapidly to seal the meat, as one of the first results of putting meat into water that does not boil is that some of the valuable ingredients of the meat pass into the water. By having the water boiling rapidly this is prevented, and by continuing the boiling for five minutes the meat has a protective covering formed about it that keeps it juicy and nutritious. It should then be cooked at a considerably lower temperature, about 160° F. It may be a little higher, but should not be much less. This method applies to boiling poultry whole, as well as to beef, lamb, or mutton. When boiling beef, allow from twenty to forty minutes to the pound, according to the quality of the beef. For a boiled leg of lamb or mutton, allow fifteen minutes to the pound.

Meat Stews.—A dainty and wholesome little meat stew may be made for the nursery as follows: Cut a tender piece of beef, lamb or mutton into small squares, rejecting all fat; just cover it with boiling water and allow it to simmer until very tender, adding in the beginning either a bit of onion, a sprig of parsely, a stalk of celery, a few leaves of spinach, or a few small pieces of cauliflower, for flavoring, and add a very few small squares of potato; season with salt when nearly done. If the child for whom this is prepared likes the vege-

tables mentioned, and is old enough, they may simply be cut into small pieces; if not, they should be pressed, when tender, through a purée sieve. Zwieback, broken into small pieces (mere crumbs), is a very nice addition to either a stew of this description or to the broths which frequently take the place of meat for very young children just beginning on a mixed diet. A stew of this character, a dish of spaghetti, good bread and butter, and some light dessert, like cup custard, will make a satisfactory dinner menu for a four-year-old. The stew in this menu supplies the salt-giving food required.

Roast Beef.—Roast beef, when used for children, should be rare and lean, with dish gravy from which all fat has been removed. If best results are desired, when roasting either beef, mutton, or fowl, see that the oven is very hot to begin with, cooling it slightly after the sealing of the surface has been done; then baste carefully, or use a double pan, allowing fifteen minutes to a pound for rare meats, twenty for well done.

Sweetbreads.—Genuine sweetbreads are allowable in the nursery as well as in invalid dietaries, as they are readily digested. They are not considered very nutritious. They must be prepared in a manner suitable for children. As soon as they come from the market they should be cleaned and parboiled. To clean, cut off all fat, bruised parts, etc., and wash quickly in cold water; boil in a granite saucepan from fifteen to twenty minutes, using boiling salted water at first; then cool and put away until needed. To complete cooking them for

children, cut them into small squares and stew them carefully in a sauce prepared as follows: Rub a teaspoonful of good butter into a tablespoonful of flour, using one cup of milk or cream; heat the milk in a double boiler, add the thickening (stirring it in carefully), the sweetbreads, and a little salt. Stir continuously until both sauce and sweetbreads are cooked, which will be in about fifteen minutes,—in ten if made in a single saucepan. The double one is preferable, as it prevents scorching. Any sauce containing milk and flour should be made in a double boiler or in a saucepan fitted into the top of a tea-kettle. Care must be taken to cook the sweetbreads the required time only, as longer cooking is likely to harden them. French peas, if tender, may be used with these for children over four when digestion is normal. A little beef broth, sweetbreads, either prepared as above or broiled, with peas or stewed celery, bread and butter, boiled rice, and a simple dessert, would be a satisfactory menu for the age mentioned, and with the exception of the peas, perhaps, it might be given at three and a half, under average conditions.

Eggs.—Eggs are a desirable substitute for meat at any time, and as an article of diet, when properly cooked, give concentrated nutriment. They may be prepared in a variety of ways, with or without the addition of other foods, but for nursery use the plain boiled egg is most desirable. Care must be taken to have them perfectly fresh, as it is of great importance that stale eggs should not be used. A fresh egg will sink in salt water

(one tablespoonful of salt to ten of water) and in proportion to its age it approaches the surface. Every woman thinks she can cook an egg, no matter how unskilled she may be in other branches of cooking, yet it is perhaps the least understood of all processes of making foods digestible by proper treatment. The usual method is to drop the egg in boiling water, which is allowed to continue boiling for two, three or four minutes, according to the taste of the consumer. The result is either an almost raw egg or one with a hard white and uncooked yellow, and, generally speaking, the whole egg, when cooked in this way, is tough and indigestible, unless it is eaten almost raw. Sufficient boiling water (about a quart) should be set aside for a few moments, when it will be of the temperature required. It should then be poured over several eggs in a good-sized saucepan, which should be covered and set back upon the range from eight to twelve minutes, according to whether they are liked very soft or not. These eggs are milky-looking, soft, cooked all the way through, and are easily digested. Dr. Thompson gives an excellent way for cooking eggs, as suggested by Henry.* Immerse a teacup in boiling water until it becomes thoroughly heated. It is then removed, and the egg is broken and dropped into it, and the cup may be wrapped in a cloth. Sufficient heat is retained by it to cook the egg without water and to remove any raw taste.

The white of egg, when eaten raw, diluted with water

* W. Gilman Thompson, M.D., Practical Dietetics.

or milk, is easily absorbed, and is a valuable food in gastric disorders.

Fish.—Fish, if fresh and of the right kind, is an excellent food for the nursery. It is of great nutritive value, and is less stimulating than meat. Being digested more rapidly, it is necessary to consider this when estimating quantities for a child's dinner. A larger portion should be served than would be given if meat were used. Broths should always be used after four years to supplement a child's dinner when fish is given instead of meat. Children who are unable to take much active exercise should have fish and broths more frequently than meat, as fish is especially indicated for persons of sedentary habits.

Fish should be scaled and cleaned as soon as they come from market, washed quickly, and put in a cool place, not on ice, but near it, if possible. The white-fleshed fish are the only kind to be considered in this connection, and the flesh should be firm and hard. If it is flabby, it is unfit for use for child or adult. The German method of selling fish alive might well be introduced in this country.

For nursery use it may be boiled, creamed, baked, or broiled, never fried. It should be served plain, or with a sauce made of cream or milk as directed for sweetbreads. The well-beaten yolk of an egg may be added to this sauce after removing from the fire.

To cream fish it must be flaked, the bones removed very carefully, and then boiled gently for twenty min-

utes, seasoned with salt, and added to the cream sauce mentioned.

For broiling, turn the flesh side to the fire first, then the skin, taking care not to scorch the latter, which is very quickly done if care is not taken.

Oysters.—The soft part of oysters may be freely used in the nursery for children over three years of age. They are very nutritious, and are greatly desired as an appetizer and for variety. The soft part is easily digested, and may be given raw to any child who takes meat and broths. The juice may be given earlier, in small quantity, but it is a frequent occurrence for a child under five to refuse to eat oysters offered in any way. They are a very acceptable addition to an ordinary milk soup when chopped fine, after the hard part has been removed. Care must be exercised as to season; they are frequently placed upon the market before they are in good condition, and just as frequently they are kept for sale longer than is desirable. The season is supposed to be from September to April, but it is safer, for children, to consider it from October to March, unless cold weather has come early or continues exceptionally late.

Squabs, Chicken, etc.—Squabs, partridge, pheasant, chicken and turkey may be used alternately with beef and mutton for dinner menus, after three years. Squabs and chickens should be stewed or broiled, and the most tender parts selected for young children; the white meat of roast chicken or turkey may be given if

minced fine. Partridge and pheasant should be broiled and the breast used in the same way.

The Use of Vegetables in the Nursery.

Spinach.—Spinach, which is a wholesome vegetable when properly cooked, acts as a useful aperient, and is frequently prescribed for habitual constipation. It should be well cleaned, cooked in an abundance of salted boiling water, and for young children pressed through a purée sieve. It may be served with or without a little cream. When prepared in this manner it will produce no irritation, and is a vegetable that may be used frequently in nursery menus, in broths or alone. It may be used for children two and a half years old.

Onions.—The onion is valuable in several ways. It adds flavor to foods, and is slightly laxative. The French consider a purée of onions a great restorative in debility of digestion. Either the Spanish or Bermuda onion is preferable for the nursery. It should be boiled tender in stock or water and served with cream sauce, or baked, wrapped in a buttered paper, in a moderately heated oven. When made into a purée it is a satisfactory addition to a dinner consisting partly of starchy foods, like rice or potatoes, supplying the fat necessary for these vegetables in the butter added to the milk or cream in the sauce to be used with the purée. As onions belong to the variety of vegetables that contain little starch or sugar, a sweet dessert, like wine jelly, should be used

with any menu calling for this vegetable. They may be used with care for children over three, watching for individual idiosyncrasies.

Celery.—Celery is both wholesome and digestible if in good condition. It may be eaten uncooked, by children over six, in very small quantities, as a single tender slip at dinner, and this well scraped, unless from the heart of the stalk. The outer stalks should all be scraped, to free them from the indigestible covering of cellulose, or woody portion, which is harmful for even an adult. For general use in the nursery it should be stewed. Care should be taken to use the water also in which the celery has been boiled. This may be done by giving it as a broth, or by using it in making the sauce to serve with the celery.

Stewed Celery.—Cut off the tops of a bunch of celery, putting aside some of the tender and perfectly fresh portions for use for the general household. Cut the stalks into small pieces, first scraping them well. Boil quite tender in salted boiling water, just enough to cover the celery. It will take from twenty-five to thirty-five minutes over a quick fire. Serve plain, or with the usual cream sauce, made, however, from half celery water and half milk instead of all milk. Experience will show that the tops usually require a longer time to cook than the stalks. For nursery diet the tender portions also should be used. The addition of a white stock would make a pleasant change, especially if made of chicken, veal stock being not quite so desir-

able for the nursery. Allowable at two and a half years of age.

Cauliflower.—This vegetable is both delicate and digestible, and a tablespoonful may be eaten for dinner by a child over three years of age. It should be taken plain or with cream sauce, not with melted butter, which is never to be allowed on the nursery table. It is very nice when cut in pieces and stewed tender in beef stock or in chicken broth. Its preparatory cleansing must be very carefully done, a preliminary soaking, head down, being the first step.

Carrots.—If very young and tender, they may be used very carefully for a child over five. Cook them soft enough to press through a purée sieve, and serve a small quantity in broth or seasoned with hot cream and salt. They may also be tried, but cautiously, when cut in very small squares, served plain or not, as preferred.

Peas and Beans.—Dried peas may be used for children three to four years old if first soaked for twenty-four hours, cooked very soft, and pressed through a purée sieve. Fresh peas, if picked the day they are to be used, may be added to the dietary of a child of two and one-half years, but they should be very young and tender. They must be cooked rapidly from ten to twenty minutes in boiling salted water—just enough to keep them from burning—in a closed granite saucepan; remembering that for all vegetable cooking, in fact for all cooking in the nursery, porcelain or granite utensils should be used invariably.

Very young beans, or a purée of dried beans, may be tried cautiously for children over three. For best results both peas and beans, when fresh, should be cooked as soon as possible after picking. The use of these vegetables must be watched closely for indications pointing to assimilation or non-assimilation. It must not be overlooked that they supply a moderate amount of proteids, hence less meat should be used with a menu containing either peas or beans. A practical method for trying a new vegetable is to reserve its use for a time when the child is in perfect condition, digesting its food easily, and when the menu contains nothing but food that has been tried and found to agree. The chances are, then, that if any trouble arises it may be traced to the exact cause. Caution should always be the watchword in the nursery.

Asparagus.—Asparagus possesses diuretic properties, and is a vegetable strongly recommended for nursery use, especially when in season. For children, only the tips should be used, cooking them tender in boiling salted water, and serving either plain or with cream sauce. They may be used for children two and a half years old.

Tomatoes.—Tomatoes are not to be eaten when milk is in the dietary. If given at all, it should be after a child has reached five years. They should be cooked slowly for several hours in a porcelain or agate vessel, strained, and thickened with a little barley, wheat, or rice flour, or a few grated bread crumbs or grated

crackers. Season, when preparing, with sugar, salt, and a teaspoonful of onion juice. Raw tomatoes must be used very cautiously, and not until a child is five years old. The seeds and skin should be discarded, and the tomato should be fresh-picked and just ripe. An under- or over-ripe tomato is dangerous food. Tomato jelly may be tried for children over three if made from strained cooked tomatoes and gelatin, the latter to be used in the usual way.

Beets.—Beet root is a valuable vegetable, an appetizer, and belongs to the class containing sugar. This knowledge is of importance in selecting menus that should contain the proportionate amount of the necessary constituents. It is not indigestible unless tough and stringy. Very young beets may be cooked tender in boiling salted water in less than an hour. Care must be taken to wash the root without bruising it, and to cut off the top at least an inch from the beet, as this will prevent the loss of the juice that is desirable. Serve plain, cut in dainty squares or slices. They may be added to the diet of a child five years old, with caution and moderation.

Apple Sauce.—This really comes under fruits, but it may be given at dinner in place of a vegetable at those seasons of the year when young fresh vegetables are difficult to find. It should be prepared very carefully. As quickly as the apples are pared and cored they should be dropped into cold water, to prevent discoloration. When ready for cooking, put them into a

double boiler of agate or porcelain, or an earthen jar set in a pot of water, and steam until tender, adding no water to the apples. When done, beat up with a silver fork or spoon, and add a little sugar and a little lemon juice, if liked. Cinnamon, delicately sifted over the surface, is a pleasant addition. If preferred, the sauce may be made, if done carefully, in an agate saucepan, using just enough water to reach the top pieces of apple (do not cover them). If pressed through a purée sieve it should be of agate, as one of tin destroys the delicate flavor of the apple. This sauce may be given to a child eighteen months old.

Brussels Sprouts.—Brussels sprouts, when very tender and perfectly fresh, may be carefully used after a child is six years old. They must be cooked tender in salted water, and served plain or with cream sauce.

Corn.—Corn for the nursery should always be used as a purée, or cooked on the cob in boiling salted water for ten minutes, the tender part to be pressed out with the back of a knife after scoring. This may be given to a child of three, as, being freed from its indigestible covering, it will not irritate. As the child grows older, the corn may be grated and served in the form of a corn pudding or omelet.

There is probably no other rule so important for infant diet as that which regulates the amount of starch to be given to a child. Of the starchy foods allowed in the nursery for dinner, rice, potatoes and macaroni are the most important. They are palatable foods, and

are easily digested if properly prepared and administered at the right age.

Rice.—Rice is not suitable in itself as a sole food. It is lacking in fat and salts, and is poor in nitrogenous substances, but the starch which it contains (its chief constituent) is easily digested, and it is, therefore, a very valuable food when mixed in proper proportions with articles of food that are rich in fat and albuminoids. It should not be given freely to a child until after two and one-half years, using it in broths from eighteen months to this age. A very satisfactory way to prepare rice for children is to wash it well, soak it overnight in cold water, and cook rapidly in an abundance of salted water for twenty minutes. The grains will swell, and they are easy to digest. If the preliminary soaking is overlooked, drop the rice gradually into the boiling water, care being taken to keep the boiling continuous while this is done, and cook rapidly for thirty minutes, stirring once or twice with a fork to keep the grains from sticking to the bottom. When done, whichever method is followed, pour the rice into an agate sieve, let a quantity of hot water run through until it runs clear, and then set the sieve upon a plate in the oven until the rice is perfectly dry. This is a very good way to prepare it for breakfast for occasional use in place of oatmeal for the summer months, serving it with cream, and a little sugar or salt, as seems most advisable. Steaming is the method usually advocated for cooking rice. Inasmuch as the starch in rice is very easily

digested, long cooking is not so necessary as when cooking oatmeal, etc.; and as, in selecting a child's menu, we do not depend upon the small amount of proteids found in rice (which are said to dissolve in cooking), the above method, judging by results, seems to be practically preferable, although steaming may be considered so theoretically.

Potatoes.—The potato is a salt-giving starch vegetable, to be eaten with lean meats or other nitrogenous foods. It is three-quarters water, and prevents concentration in food. The remaining quarter is nearly all starch. Care should be exercised in the selection of potatoes, those that are yellowish white being preferred. The fact that it takes three and a half hours to digest boiled potatoes, and two hours for those that are properly baked, will indicate at once which method is preferable for the nursery. The desired temperature for cooking starchy foods can be reached in the oven with care, and a potato of medium size should be baked in from thirty to forty-five minutes. When done in this way, they may be given occasionally with dish gravy from roast beef, roast mutton, or broiled beefsteak, or with salt and cream, to a child of eighteen months; but it may be safer to wait a little while longer, according to the condition of the child. The potash in potato, which is an important salt and soluble in water, is not lost when potatoes are baked. For this reason, when mashed potatoes are desired for children, they should either be steamed in a steamer or a closed colander placed over

boiling water, or be boiled in the skin. When done, they should be lightly beaten with a fork, and a little cream and salt added. If properly cooked in this way, a potato will assume a mealy or floury appearance, and boiled potatoes should never be used in the nursery unless done in this way.

Macaroni, etc.—Macaroni, spaghetti and vermicelli are all preparations of flour, supposed to be made from hard Italian wheat, rich in gluten. Sir Henry Thompson observes of macaroni, "It is certainly to be lamented that so little use is made in our country of Italian pastes. Macaroni in all its forms is, in fact, an aliment of very high nutritious power, being formed chiefly of gluten, the most valuable part of the wheat, from which the starch has been removed. Weight for weight, it may be regarded as not less valuable for flesh-forming purposes in the animal economy than beef or mutton. Most people can digest it more easily and rapidly than meat; it offers, therefore, an admirable substitute for meat, particularly for lunch or mid-day meals." It must be selected with care, as there are many imitations in market which contain little gluten and much starch. To prepare it for the nursery, add about ten sticks of macaroni, broken into small pieces, to a quart of boiling salted water, dropping the pieces in one by one, that the water may continue boiling. Cook gently for twenty minutes, drain thoroughly, and put it back in the saucepan, adding cream or a pint of milk thickened with a teaspoonful of flour rubbed smooth in

a teaspoonful of butter, and allow it to simmer for another twenty minutes. Enough milk or cream should be allowed to cover the macaroni well when done with the cream sauce which results from careful simmering. Spaghetti may be prepared in the same way. Vermicelli is to be used as an addition to broths, but there is no reason why it should not be prepared as directed above.

If any of the vegetables mentioned disagree, upon careful observation, with children possessing certain inherent peculiarities, their use should be postponed until after the second teeth have appeared. It is always advisable to watch for indications of habitual non-assimilation of certain foods, and, if necessary, not to use them until later years, when a more liberal dietary in many respects may be allowed.

Salads dressed with olive oil may be given after second dentition ; the oil is a valuable nutrient, and the fresh green supplies an important part of a growing girl's or boy's requirements.

The Place of Fruit in the Nursery Diet.

The use of fruits in nursery dietetics is of the greatest importance. They contain a very large proportion of water, but their chief food-value lies in the sugar, acids and salts which they contain, which cool the blood, aid the digestion, tend to promote intestinal action, and correct tendencies to constipation. They are especially adapted to the nourishment of the brain and nervous system.

The selection and use of fruit demand careful consideration, and it must be used moderately at all times, as any excess tends to intestinal irritation. The seeds, pulp and cellular parts are usually the disturbing elements. The juices are, as a rule, perfectly wholesome, and may be used some time before solid fruits may be given. The *Lancet* says, "Nothing is more essential to learning than frequent reiteration. . . . It might be supposed that by this time every one understood the importance of observing particular care in the selection of a summer dietary, especially as regards fruit. Hardly any question of domestic management is either more vital or more elementary, yet error continually arises in this connection in the simplest way. A few days ago a child died soon after eating strawberries. Why? Because the fruit had been purchased *two days previously*, and, as was only to be expected, when eaten, was in a state of decay. It is impossible to resist the impression that neglect had something to do with the sad result in this instance. Luscious fruits are particularly liable to putrefactive change, and such thrifty processes as exposure to a cold and dry air, spreading out, and the like, suffice only to postpone decay for a brief period. We cannot do better than point to the incident above mentioned in order to remind the vender and purchaser alike that freshness is the only certain guarantee of safety when any succulent fruit forms an article of diet. We have not forgotten that another hardly less serious danger of the season awaits those

who indulge in fruit when it is under-ripe. In this case taste as well as judgment commonly interposes a caution the importance of which can hardly be exaggerated. Yet here, also, the consequences of neglect have too often been sadly apparent."

As may be inferred from the above remarks, it is of the first importance that fruits be fresh, ripe, and in good condition. They must also be delicately handled, as their greatest value lies in the juice they contain, which may readily be lost in whole or in part by careless handling. A child two and a half years old may usually be allowed the juice and pulp of a sweet ripe orange; no amount of sugar will correct the acidity of a sour orange, in a wholesome way, for nursery use. The juice of a sweet orange is indicated in feverish conditions, and it may be freely used under almost all circumstances after a mixed dietary has begun. It is well to remember, in giving all fresh fruits, that the best time is to give them for breakfast or for early dinner, as all fruit allowable for supper should be cooked. It should also be remembered that when fat and meat form a considerable portion of the menu, fresh fruit should be carefully given; therefore, in winter menus, when fat and meat are necessary for dinner, it is advisable to use fresh fruit for breakfast and puddings, etc.; for dinner, desserts. In summer, when meat and fat should be sparingly used, fresh fruit may be given for both breakfast and dinner; never for supper at any season of the year. Baked apples may be used frequently

after a child is two years old. Dr. Rotch says a baked apple may be given at the evening meal, when a child is fourteen to fifteen months old; or, for variety, the apple can be made into a simple sauce, never, however, having the sauce made with much sugar. The pulp of a raw apple, scraped with a silver spoon or knife, may sometimes be given for breakfast. Apples, cooked or raw, are particularly useful with a concentrated diet (beef broth, eggs, etc.), and if properly selected they are easily digested. As a rule, a child who is delicate and has little appetite for breakfast will rarely turn away from a juicy baked apple, daintily served. For eating raw, a highly-colored apple, with rosy, sugary flesh, is most digestible, if care be taken to see that it is properly masticated. Any really ripe apple may be used with safety if peeled and scraped. The juices of almost any fruit may be used at two and a half years, either as a drink or with the varieties of desserts or farinaceous foods allowed. Cherries, grapes, raspberries, strawberries, blackberries, pineapples, and similar juicy fruits are suitable for this purpose. These juices may be prepared in the following manner, and possess the advantage of being ready for use at all seasons of the year. Express the clear juice of the fruit in the usual way, and boil it with a small quantity of sugar, about a quarter of a pound to a pint of juice. Boil fifteen minutes, stirring constantly, and skim as long as any scum arises. Then strain, put in bottles or jars, and seal.

After a child is two and a half years old, stewed fruits should be freely used, especially apples, prunes, figs, and peaches. For many children all ripe fruits are laxative, and for this reason alone, if for no other, they are valuable aids in regulating a diet that is frequently much too concentrated or too starchy, keeping a child dull, sluggish, and unhappy.

The following fruits may be used after three years and a half, according to the child's power of digestion:

Cranberries, which rank as an antiscorbutic and an astringent, may be given in the form of a sauce or a drink. They should be strained when used in the nursery. To make a cooling, refreshing drink, boil the berries in water double the measure of the berries. Boil until the juice has been thoroughly extracted, sweeten with one-half pound of sugar to a quart of juice, boil ten minutes, bottle, and seal while hot. This must be largely diluted.

Strawberries are wholesome for nearly every one when fresh and ripe, if taken in moderation, but results must be carefully watched for individual idiosyncrasies. Some physicians recommend their use as early as two years and a half, but it is better to err on the safe side, and "make haste slowly."

Dates and **figs** are highly nutritious, much more so than many other fruits, and in large quantities they are usually aperient. Children generally like dates when seeded, pressed flat, and served with a slice of buttered brown bread or saltine crackers.

Pears, when ripe, may be used carefully, but they are not to be preferred to other fruit for the first five years, as, in the opinion of many, they require a long time for digestion, and, being decidedly laxative, if not properly digested they are likely to give trouble.

Peaches may be used from eighteen months up, when fresh and ripe and prepared carefully,—that is, pared immediately before eating. Dr. Rotch says a ripe peach, when in season, may often be given with benefit during the second year, especially if the infant is inclined to be constipated. They should always be pared for nursery use, as should every skin fruit, like the pear, apple, plum, etc. Diphtheria has been known to be carried by unwashed apples ; and, even if no contagion exists, there is something decidedly unpleasant in the thought of eating fruit that has been handled constantly by unwashed hands from the time of picking, through transit, and until it reaches the table. Even dates and figs suffer no appreciable loss by being quickly but carefully washed and dried over a range or in the sun, and they are infinitely more appetizing when treated in this way. Sterilized or boiled water should always be used for this purpose.

Grapes occupy an intermediary position, and may be used medicinally in many cases, under the guidance, however, of a physician. They are very rich in sugar, both in the fresh and in the dried form (raisins), and are easily digested when fully ripe. They are particularly useful in convalescence and in anæmic and catar-

rhal conditions. The skins and seeds of all grapes must be rejected; the pulp, also, of many of them, chiefly on account of the seeds they contain. The pulp of Tokay, Malaga and similar grapes may be eaten freely. Grape juice is especially refreshing, and is liked by all children. It may be given among the first fruit juices allowed. A pleasant way to prepare grape juice for young children is to use a fruit-press (a press that is used for mashing potatoes will answer very well), putting pulp, skin and all into it and expressing the juice, which may be given clear or diluted for dessert, or as a cooling drink in hot weather, whenever and in whatever quantity desired. In this way some of the valuable ingredients of fruit may be added to a child's dietary long before the use of solid fruit is allowed. The use of these fruit juices corresponds, in the order of the menus indicated, to the use of the vegetable waters spoken of when making meat broths, which may also be used before even vegetable purées are allowed.

Blackberries are an astringent fruit, and they must be perfectly ripe to be eaten in their natural state. The usual blackberry in market is unripe, although black, and is unfit for food unless cooked. The berries are not sweet when in this condition, and if eaten they will easily cause a period of indigestion. A very good jelly may be made by using gelatin soaked in blackberry juice instead of cold water, in the proportion of a box of gelatin to a pint of juice, adding one cup of sugar and three cups of boiling water. Boil, strain,

cool, and keep in covered jars or tumblers. This method, with the variations called for by the different fruits in the way of sugar, flavoring, etc., will be found an excellent one for the use of all fruits. Cherries, pineapples, prunes, oranges, apples, grapes, raspberries, currants and rhubarb are all to be recommended in this form. A further variation may be made at any time by adding the whites of eggs in proportion to the quantity made (as, for instance, two to four whites to one box of gelatin), beating the whites stiff, and whipping them into the fruit jelly a little at a time before it is quite firm. This may be eaten plain or with sweet cream.

Corn starch and blancmange may be varied by cooking them with fruit juices instead of milk, to be served with milk or cream.

The white of egg beaten very stiff and slightly sweetened, or whipped cream, either of them to be used with the addition of fruit or fruit jelly, is a dessert that is simple, easily made, and one that not only pleases the eye and palate, but possesses desirable nutriment as well.

Whilst the selection of a fruit or fruit dessert may seem the least important portion of the nursery menu, it does not occupy this position, as, if used at all, it must be considered in connection with the idea carried out in selecting the entire menu for the meal. We must always remember the rules to be followed in health in regard to proportionate quantities of food containing

albuminoids, starches, fats, and sugars,—one supplementing the other. Under other conditions than those of health an entirely different plan must be followed, as special conditions call for specially directed nutrients, and at such times fruits and vegetables are not desirable, unless recommended by some one of unquestionable authority,—*i.e.*, the family physician.

Desserts.

Brown Betty.—Alternate layers of sliced apples and dry bread crumbs, just enough crumbs to cover the apples. Add bits of butter, sugar, and ground cinnamon. Do this until the pudding-dish is full, having bread on the top. Pour half a cup of molasses or milk and half a cup of water over the whole, set the dish in a pan of boiling water, and bake in a moderately hot oven for three-quarters of an hour. Serve with cream.

Fruit Tapioca Pudding.—Boil one-half cupful of pearl tapioca in one quart of boiling water until soft and transparent. Add one-half teaspoonful of salt and one-half cupful of sugar; pare and core three tart apples, or three pears, and fill the centres with sugar and a little cinnamon or cloves; put in a baking-dish, pour the tapioca around them, and bake until the fruit is tender. Serve hot or cold, with cream.

Strawberry Custard.—Make a boiled custard with the yolks of five eggs, one quart of milk, one-half cup-

ful of sugar, and one-half teaspoonful of vanilla. Crush and strain one pint of berries, and mix with them one-half cupful of powdered sugar. Gradually beat this into the well-beaten whites of four eggs. If the fruit is very acid, more sugar will be required. Serve the custard in small glass cups, and pile the strawberry-float on top. (*Household.*)

Raspberry Blancmange.—Any blancmange may be made with fruit juice according to the following directions:

Into a pint of boiling fresh milk stir two tablespoonfuls of corn starch made smooth in a little cold milk. While thickening, add two tablespoonfuls of sugar and one-half cupful of raspberry juice, and turn into a double boiler, where it should be steamed for half an hour. Place in moulds (tiny cups are desirable for nursery use), cool, and serve with sweet cream.

Cherry Jelly.—Use one pint of cherry juice instead of cold water, to soak the required amount of gelatin; add the juice of two lemons, two cups of sugar, and three cups of boiling water. Some may prefer a trifle more sugar. Sweeten to taste, and seal in jars or tumblers.

Rhubarb and Orange Jam.—Allow one quart of finely cut rhubarb, six Valencia oranges, and the same weight of sugar as of fruit. Peel the oranges, remove as much of the white pith as possible, divide them, and take out the pips. Put the pulp, half the rinds, and the rhubarb, peeled and cut up, into the scales, weigh,

and allow the same quantity of sugar as of fruit. Then put all into the preserving kettle, bring to a boil, skim, and simmer for an hour, or until done.

Dates and Cream.—Remove the stones from dates, then cut them rather fine, and put them in a glass dish; cover them with whipped cream, and stand aside in a cold place for thirty minutes before serving. You will have a dainty and wholesome dessert that can be eaten by the children of the family.

Dates and figs may be washed, soaked overnight, and stewed slowly, adding a little lemon juice if liked.

Jellied Apples.—Pare and slice thin a dozen or more tart apples. Place in a pudding-dish alternate layers of apple and brown sugar, and a sprinkling of cinnamon, and when the dish has been filled in this way, pour over it one-half cup of water. Lay a buttered plate over the top, and cook slowly for three hours. Set in a cold place, and when ready turn out into a glass dish. Whip half a pint of cream and pile it up around the jellied apple.

Apple Snow. (Adapted from Davies.)—Reduce two apples to a pulp, press this through a sieve, sweeten, and flavor. Have ready the whites of two eggs, beaten stiff. Beat the apple-pulp to a froth, and whisk the two together until they look like stiff snow.

Rhubarb Jelly.—To be made in May. Wash the stalks, and cut without peeling; cover with cold water and simmer until soft. Then proceed in the usual manner, letting the juice drip through a jelly-bag; do not

squeeze. Use one pound of sugar (granulated) to a pint of juice, and boil fifteen minutes. Heat the sugar in the oven, stirring frequently; add it at the end of the fifteen minutes' boiling, and stir until it comes to a boil. Strain through cheese-cloth, pour into jelly-tumblers, and cover with melted paraffin, a second layer after first has cooled.

Rhubarb Mould. (Davies.)—One quart of red rhubarb cut in pieces, put into a covered saucepan. Let it boil until it is a pulp; soak half an ounce of gelatin in cold water, pour just enough boiling water over it to dissolve it; add to it the rhubarb, with sugar to sweeten; let it boil fifteen minutes; add a few drops of essence of lemon. Butter a mould and pour in the rhubarb. Next dip the mould in hot water, and turn out on a glass dish.

Rhubarb Jam.—Rhubarb jam is desirable for nursery use, and may be made in the proportion of a pound of sugar to a pound and a quarter of rhubarb, adding a little lemon peel. Boil one hour after the sugar has dissolved.

Orange Jelly.—Dissolve three-fourths of a box of gelatin in one and one half pints of water; add one-half pint of orange juice, sugar to sweeten, and the juice of one lemon. Boil, strain, and cool, and keep covered until used.

Sago Jelly.—Soak one cup of sago overnight in one pint of cold water. In the morning add one pint of boiling water. Boil in a double boiler one hour;

add one teaspoonful of salt, one cup of sugar, and one teaspoonful of lemon juice. (*Trained Nurse.*)

Prune Jelly.—Cover one pound of prunes with one quart of water; cook slowly. Add sugar to sweeten, and one-half box of gelatin dissolved in a pint of water and boiled. Strain, cool, and keep covered.

Clarified Apples.—Prepare the apples as for sauce, in even-sized pieces, and simmer until tender in boiling sugar and water, turning the pieces once, using a flat agate saucepan, from which it is easy to remove the pieces of apple without breaking them as they become tender. Cook the syrup for ten minutes after the apples have been taken out, then pour it over them, sprinkle with cinnamon, and let them cool in the syrup. Orange or lemon juice may be used for flavoring.

Apple Water.—Mash two large tart apples that have been sprinkled with sugar and baked tender and slightly brown, and pour over them a pint of boiling water; let stand covered in a cool place for an hour or two, strain, and use.

Irish Moss Tea.—Take a handful of Irish moss that has been washed and drained; pour cold water over it, and let it simmer on the back of the stove until it is dissolved; then strain and mix with lemon juice and sugar. This is said to be excellent in rheumatic affections. If one is troubled with a dry, hacking cough at night, it will often give relief if kept near the bedside and frequently sipped.

Fruit Sauce.—Mash a quart of ripe fruit; beat it, sift a cupful of sugar over it, and set away; if the fruit is very sweet, less sugar will be required. About ten minutes before the sauce is needed, set it over the fire and stir constantly; when heated nearly to boiling, turn it about the base of the pudding, which has been placed in a deep platter. If the pudding boiler has a tube in the centre, as it usually has, there is, of course, a hole in the centre of the pudding, and this may be filled with the fruit sauce, which is, by the way, as attractive in appearance as it is delicious in taste.

Marshmallow Drops.—This is a confection greatly relished by many, healthful and unobjectionable. It can be made quite conveniently at home; if the best of materials are used and care is exercised, the product will be fully equal to any that the market affords, and it can be made at any time and in any quantity to suit the occasion. Few people have an idea of the ingredients used or of the manner of their use, but here is the whole secret: A half pound of gum arabic is to be dissolved in a pint of water; strain the solution, to remove any specks of organic matter contained in the gum, then add one-half pound of white sugar; place the whole over a moderate fire, and stir continually until the sugar is dissolved and a honey-like consistency is reached; then add, little by little, the whites of four eggs, thoroughly beaten, and stir the mixture till it becomes thin and will no longer adhere to the finger. The marshmallow factor is added by

flavoring with as much tincture of marshmallow as may be desired. The compound is then poured into a tin or earthern vessel which has been lightly covered with powdered starch; when cool, it is cut into squares, which are also dusted with the starch, and the process is completed. (*Good Housekeeping.*)

Orange Syrup.—Squeeze the juice of thin-skinned oranges through a sieve, and to every pint add one and one-half pounds of powered sugar and the juice of one lemon. Boil the syrup fifteen minutes, and skim as long as any scum rises. Strain it, bottle, and seal up tight, and it will keep a long time. Added to a glass of water it makes a delicious drink for an invalid.

Lime Water.—Lime water is easily made at home for nursery use by putting a piece of unslaked lime the size of a walnut into two quarts of filtered water in an earthen vessel, and stirring thoroughly; allow the mixture to settle, and pour off the clear solution as required for use, replacing the water and stirring up as consumed. (Yeo.)

Rice Water.—This is a useful drink in dysentery, diarrhœa, etc. Wash well one ounce of rice in cold water, then soak for three hours in a quart of water kept at a tepid heat, and afterwards boil slowly for an hour, and strain. It may be flavored with lemon peel, cloves, or other spice. (Pavey.)

Rice Milk.—Soak one ounce of rice for twelve hours, wash it quite clean, and drain it. Add the soaked rice to a pint of boiling milk, with half a teaspoonful

of salt and sugar. Stir well and cook slowly for one hour. Rub through a hair sieve. Sago or tapioca may be substituted for rice. (Yeo.)

Bread Jelly.—Take four ounces of bread crumbs two or three days old, soak in cold water for six or eight hours, then squeeze all the water out of it (lactic acid and other peccant matters are thus removed). Place the pulp in fresh water, and boil gently for an hour and a half to break up the granules of starch and promote its conversion into dextrin and glucose. Rub this semi-fluid gruel through a fine hair sieve; when cold it forms a smooth jelly. It will not keep long. (Yeo.)

Mulled Egg.—To be used in diseases in which the symptom of cough shows a certain degree of persistence. It is simply an emulsion of the yolk of egg in warm water, sweetened and seasoned to taste. It is prepared, as is well known, by mixing powdered sugar, the yolk of an egg, and a coffeespoonful of orange-flower water, adding boiling water gradually while stirring the mixture. (Fonssagrives.)

Maple Molasses Gingerbread.—One cupful of boiling water, a piece of butter the size of an egg, one cupful of maple molasses, one-half teaspoonful of soda, one-half teaspoonful of ginger, two cupfuls of flour. Common molasses may be substituted for the maple molasses, but the flavor will not be the same. (*Household.*)

A Wholesome Sponge-Cake.—First sift the flour and sugar. Whisk the whites of the eggs stiff. Beat

the yolks of the eggs very light in a large bowl, then stir in very gradually the sugar and a tablespoonful of milk ; add the whites, blending all well before gently stirring in the flour and a heaping teaspoonful of baking-powder. Bake in a well-buttered mould for one hour in a moderately quick oven. The proportions for a small cake are three eggs, one and a half cupfuls of flour, and one cupful of pulverized sugar. The batter should pour easily.

Rice Pudding with Eggs.—As eggs should be cooked lightly to be digestible, they should not be added to the farinaceous or milk puddings when first mixing, as is the usual custom. For rice pudding steam the rice tender in milk, using four teaspoonfuls of rice to a pint of milk ; allow it to cool for a few minutes before stirring in two well-beaten eggs, which should not curdle, but should be partly cooked by the hot rice. Sweeten to taste, and add vanilla, lemon, or any flavor desired. Grated nutmeg is very nice. Brown lightly and very quickly in a very hot oven. The above may be varied by pressing the rice through a purée sieve when hot. Add the eggs and flavoring, omit browning, and steam the whole mixture for only a few minutes in a double boiler. The yolks also may be omitted if a white pudding is desired, using four whites in place of two whole eggs. This need not be steamed after mixing if the whites have been beaten stiff.

Rice Pudding without Eggs.—Put two tablespoonfuls of rice into two cupfuls of sweetened and

flavored milk, and set it in a moderately hot oven. Stir every fifteen minutes at first, and every half-hour while the top forms. Any good cook understands the process, which, if carefully followed for two hours, produces a creamy, slightly brown pudding that is invariably relished by children. A few raisins may sometimes be added for children over five years old.

Snow Pudding. (Burnet.)—Put into half a pint of cold water half a package of gelatin; let it stand one hour; then add one pint of boiling water, half a pound of sugar, and the juice of two lemons. Stir and strain, and let it stand, covered, in a cool place all night. Beat the whites of two eggs very stiff, and then beat them well into the mixture. Pour into a mould.

Bread Pudding.—Soak one pint of fine bread crumbs in a pint of milk until soft, add three tablespoonfuls of cocoa dissolved in a little water or a dessertspoonful of vanilla for flavoring, three well-beaten eggs, a cupful of granulated sugar, and another pint of milk. Either plain or whipped cream is very good with this pudding.

Koumyss.—With a little attention to some important details, koumyss may be readily made by any one, the sole ingredients requisite being milk, sugar, and yeast. A clean quart bottle is filled three-fourths full of perfectly fresh milk, and to this is added a tablespoonful of fresh brewer's yeast, or one-fourth of a cake of compressed yeast, and a tablespoonful of white sugar. The bottle is thoroughly shaken, and then

filled with milk to within two or three inches of the top, and again shaken. It is then tightly corked with a cork that has been softened by soaking in hot water, and for this purpose a corking machine should be employed. When the cork is driven home it is properly tied down. The bottles are now placed in an upright position in a cold place, at or near the temperature of 52° F., where they should remain two or three days. They are then put on their sides in a cool cellar or refrigerator. Koumyss is at its best, probably, when five or six days old, but can be kept indefinitely at a temperature not exceeding 52° F. (Frederick P. Henry, M.D.)

Wine Whey.—Boil a quart of milk, add to it half a pint of wine ; put on the fire till it boils again, then set aside till the curd settles ; pour off the whey and sweeten to taste. It is said that good country cider is as nice as the wine. (*Trained Nurse.*)

Barley Water with White of Egg.—Take a tablespoonful of coarse barley and wash well with cold water, rejecting the washings. Then boil for an hour or more with a pint and a half of clean water, in a covered vessel or saucepan. Add a pinch of salt and enough sugar to render palatable, and strain. To four or six ounces of barley water thus prepared add the white of one egg.

The value of this preparation in gastro-intestinal inflammation and irritation is not easily overestimated. In the enterocolitis (inflammation of the small intestine

and the colon) of very young infants, its exclusive administration for thirty-six or forty-eight hours will often relieve when all other measures have failed. (J. Hobart Egbert, M.D.)

The following recipes have been tested, and may be used for any child in fair health, as soon as simple desserts are ordinarily allowed, which, under average conditions, is after two and a half years. For the earlier desserts, fruit juices, which should be among the first to be given, have already been discussed.

Junkets and Custards.—Junket, made with the essence of pepsin (Fairchild's), is one of the first solid desserts to be recommended, and it may be given at eighteen months, as it contains a large amount of nutriment, is easily digested, and is usually very acceptable. It can be varied for later years in several ways,—by the use of beaten raw egg stirred in the milk, or by using any flavor that is not acid. A baked apple is also one of the first desserts allowed. A sound ripe apple baked properly is an easily digested delicacy, taking but an hour and a half for preparation in the stomach for assimilation. It is nourishing, a stimulant, and altogether a food to be commended for nursery use, and it may be used as one of the first important changes when making additions to a child's dietary of milk and cereals. As stated elsewhere, Dr. Rotch allows it to be used from the fourteenth to the fifteenth month.

A very satisfactory way to bake an apple for nursery use is to peel and core it carefully, pour a cup of cold

water over it, sprinkle lightly with sugar, cover closely, and bake in a moderate oven until tender. If carefully done, it should be as juicy and soft as jelly.

Among the lighter desserts are whipped cream and soft custards. These are easily prepared, and give sufficient variety until a child is three years old, when ice cream, rice pudding, orange float, tapioca, farina, and the various milk puddings may follow in their order.

The chief point to remember in the selection of desserts is that when the child has a full menu for the earlier part of the dinner—*e.g.*, meat or broth, one cereal (rice), one juicy vegetable (purée of spinach), and bread and butter—a fruit or a light dessert is called for. But when for unavoidable reasons the main part of the dinner is light, as, for instance, bread and butter and beef broth, a substantial dessert should be chosen, —*i.e.*, rice or tapioca pudding, milk jelly or cup custard, all of which contain the constituents of a varied diet, and thus supplement what would otherwise be an insufficient meal. When carrying out this idea, eggs should be added to the milk puddings, omitting them when lighter desserts are needed.

Soft or cup custards may be made white or yellow by using or omitting half of the egg. They may also be colored and flavored with fruit juices, as cherry, prune, raspberry, etc. The proportions for a white cup custard would be the whites of three eggs to a pint of milk, and one or two whole eggs for the yellow

for the same quantity of milk. When using fruit juices for custards, take less milk in proportion to the quantity of juice used. Always use hot milk when adding the sugar and salt, and for a soft custard stir in a double pan or boiler until it thickens, using more milk than is called for in a recipe for cup custard. A soft custard should boil three minutes. A cup custard should be poured into cups, set in a pan of hot water, and baked twenty minutes in a hot oven.

Gelatin may be used in the nursery in a variety of ways. Dissolve one-half box in one pint of water, one-half cup of sugar, and one-quarter pint of fruit juice, using lemon and orange, currant juice and lemon, prune juice (one pound of prunes to a quart of water boiled to a syrup), grape juice, blackberry syrup, or one made from cranberries, remembering the astringent properties of both blackberries and cranberries, and the laxative quality of prunes. Boil the mixture, with whatever flavor, strain and cool on ice—covered, as gelatin readily absorbs germs, odors, etc.

Plain jelly made according to these directions, flavored with orange, vanilla, or lemon, and whipped with cream before it is quite firm, is a delicate and appetizing dessert.

Whipped cream flavored with prune juice, or with a small quantity of dry cocoa, is another dainty dessert.

Grape sauce, or jelly made with gelatin, is especially refreshing to convalescents.

A simple fruit jam, made without the seeds or skins

of the fruit, may be used occasionally with bread and butter for children over three years of age.

As mentioned before, these desserts can be easily made by any plain cook. The value of the suggestions lies in the variety that may be given to two seemingly conventional desserts,—custard and gelatin.

Milk puddings may be equally varied by using a little judgment, a little experimenting, and by choosing simple, sweet ingredients, such as tapioca with fruit, rice with or without eggs, barley flour with orange flavoring, bread crumbs or bread soaked in milk, with chocolate or apple and eggs added, etc.

Irish moss, dissolved and used with corn starch, made into blancmange, is a pleasant change. Add chocolate to the ordinary recipe for blancmange, and serve with sweet cream, for another variation.

Milk jelly is the only dessert mentioned that may not be generally known. It is said to be retained by the most sensitive stomach, and will nourish when almost nothing else will be tolerated.

Heat one quart of milk, then add and stir until dissolved one pound of granulated sugar; add an ounce of gelatin dissolved, and allow the mixture to boil for ten minutes. Before straining and cooling, add the juice of three lemons or any flavoring desired. Pour into cups, cover, and keep in a cool place.

With the varieties suggested, and the long list of stewed fruits and fruit juices that may be used, it seems incredible that mothers will persist in feeding their little

darlings with sweetmeats, doughnuts, cookies' heavy rich cakes, preserves, and canned fruits, even, as the writer has seen, going so far as to give them tea and coffee, with no consideration whatever for the delicacy of the child's digestion.

Food for Illness.

Peptonised Foods.—To advise definitely what to feed to those who are delicate, convalescent or seriously ill, requires specific knowledge, as special conditions call for specially directed nutrients. Much may be done in this field as a safeguard or as a preventive by the nurse or mother who thoroughly understands the underlying principles of feeding in illness, and one of the first subjects she is called upon to give attention to is that of peptonisation of foods—making such work an aid to digestion when illness threatens, or a support when illness really exists. As milk is a food generally relied upon in illness, it is very important to know how to make it assimilable. The attempt to render milk easy of digestion, or more digestible, by thickening with gruels, gelatine, boiled flour, arrowroot, etc., are expedients which have been tried for a great many years. To make milk a digestible food for the sick, some safe plan must be adopted, some process in which *no mistake can be made*—because of the great

risk involved in faulty feeding during illness. The use of the Fairchild peptonising products is such a process and is greatly relied upon by the medical profession in all kinds of illness. It is easily understood and practised, specific directions being found with each package. By means of this peptonising process, the proteids of cows' milk are changed into a more soluble and assimilable form. The sugar and mineral elements which exist in all milk are *always* ready for digestion, and need no treatment; but the cheese of cows' milk is apt to make trouble for the invalid or the person with faulty digestion; it forms large compact curds in the stomach and may thus produce irritation and pain.

Cold Process.—Peptonised milk prepared by the "Cold Process" often proves especially acceptable and successful. It has little or none of the characteristic taste of peptonised milk as ordinarily prepared, and it has been found in many cases that the peptonising principle thus simply mixed with the cold milk exerts sufficient action in the stomach to insure the proper digestion and assimilation of this food. This "cold process" milk is also preferred by patients who dislike milk that has been "cooked," though ever so slightly. The other methods, of course, are available where the stimulus of hot foods is required.

Time a Consideration.—During periods of illness there is frequently too little time for all the duties requiring attention and here it is an important consideration with the caretaker that the "Cold Process" takes less time than the "Warm Process," and if the milk be found equally digestible by the former method, there is no reason why it should not be used. Should there be evidences of imperfect digestion under its use, the other methods should be used.

In the practical application of the peptonising process it is important to remember that great heat *destroys,* or cold *stops,* the digestive action, so that when the process has gone far enough, the milk should be either immediately brought to boiling point or put directly on ice. Digestion will continue as long as the milk is kept warm—at a temperature favorable to the action of the peptonising principle—until it is completely peptonised.

Degree of Digestibility Can Be Controlled.—One of the peculiar features of the peptonising process is that the milk may be given just that degree of digestibility that is required under special conditions. It is wholly controlled by the length of time during which it is subjected to heat.

Essence of Pepsine, Fairchild.—Essence of Pepsine, Fairchild, is a reliable and practical agent

for making junket and whey as foods for invalids and infants.

In the process of making whey with Fairchild's Essence the mass of caseine and a portion of the fat are removed from the milk, leaving the soluble albuminoids, infused with the cordial and digestive properties of the Essence, which is a pure extract of the gastric juice; hence it is quite natural to expect that this whey will be found readily digestible, a perfect nutrient and of peculiar service in preparing the way for a return to diet suitable to normal conditions.

Recipes for preparing acceptable delicacies for the sick and digestible desserts for the well, with Fairchild's Essence of Pepsin.

How to Make Whey.—Put one pint of fresh milk into a saucepan and heat it lukewarm (not over 100° F.); then add two (2) teaspoonfuls of Essence and stir just enough to mix. Let it stand until firmly jellied, then beat with a fork until finely divided; strain, and the whey (liquid part) is ready for use. Keep in a bottle near ice.

Junket.—Into a clean saucepan put one-half pint of fresh, cool milk, heat it lukewarm (not over 100° F.); then add one teaspoonful of Essence of Pepsine, Fairchild, and stir just enough to mix; divide quickly into small cups or glasses and let stand until firmly jellied, when the junket is ready

for use, just as it is, or with sugar; it may be placed on ice and taken cold.

Egg Junket.—Beat to a froth one strictly fresh egg; sweeten with two teaspoonfuls of sugar; then stir in thoroughly one-half pint of fresh, cool milk; put this mixture into a clean saucepan and heat it lukewarm (not over 100° F.); then add one teaspoonful of the Essence and stir just enough to mix; divide quickly into small cups or glasses, and let stand until firmly jellied, when the junket is ready for use, just as it is, or with grated nutmeg; it may be placed on ice and taken cold.

Cocoa Junket.—Put an even teaspoonful of any good cocoa and two teaspoonfuls of sugar into a saucepan; scald with two tablespoonfuls of boiling water; rub this paste smooth; then stir in thoroughly one-half pint of fresh, cool milk; heat this mixture lukewarm (not over 100° F.); then add one teaspoonful of Essence, and stir just enough to mix; divide quickly into small cups or glasses, and let stand until firmly jellied, when the junket is ready for use; it may be placed on ice and taken cold; as a dessert may be served with whipped cream.

Coffee Junket.—Dissolve two teaspoonfuls of sugar in two tablespoonfuls of clear, strong coffee; mix this thoroughly with one-half pint of fresh, cool milk; put the mixture into a clean saucepan and heat it lukewarm (not over 100° F.); then add

one teaspoonful of the Essence and stir just enough to mix; divide quickly into small cups or glasses and let stand until firmly jellied, when the junket is ready for use; it may be placed on ice and taken cold; as a dessert may be served with whipped cream.

To Make Vanilla, Bitter-Almond, or Strawberry Junket.—Add the flavoring to the cold milk and then prepare as usual—a half teaspoonful of Vanilla or Bitter-almond extract, or a tablespoonful of pure concentrated Strawberry Syrup to a half pint of milk.

Panopepton in Various Ways.

Panopepton.—Panopepton is a food to be resorted to under the care of the medical adviser in cases of extreme exhaustion and intolerance of ordinary foods, in cases where milk in any form is considered undesirable for the time. It is much used in the whole field of the therapeutics of feeding, under the care and advice of the physician; is used as a supplementary food in invalidism; is a valuable resource in the sustaining of an infant in conditions of great prostration and intolerance of milk. Panopepton is offered as a ready-made peptonised food of a very comprehensive and complete and definitely stated composition. It is described as containing the entire soluble and digestible constit-

uents of whole wheat and lean beef converted into a soluble form, with a definite "nutritive balance," ratio, of protein to carbohydrate and held in a permanent, sterile, agreeable solution, thus affording a food with properties and qualities peculiar to itself.

Panopepton may well be considered as a "rest" food under certain conditions, particularly where not only nutrition but stimulus of the functions is indicated, in order to maintain life and energy for the time being, under conditions so grave that ordinary foods would probably aggravate rather than help. The analysis of panopepton is given as follows: Total dry solids, 22%; proteins, 6.30%; carbohydrates, 13%; inorganic salts (ash) 1%—in pure Spanish sherry; is absolutely free from cane sugar or chemical preservative.

In addition to the usual manner of giving Panopepton it may be prepared in a variety of ways to make it pleasing and grateful to the invalid. The following are suggested:

Iced Panopepton.—To a small glass half-full of clean, crushed ice add one tablespoonful of Panopepton; let it stand a moment and then sip slowly.

Panopepton Jelly

One ounce of fresh Celery (cut in small pieces).
One-half (½) of a small box best Gelatine.

One-quarter teaspoonful.....Salt.
Two dashes.....Pepper.
Six tablespoonfuls.....Panopepton.
Two cupfuls.....Cold Water.

Soak the gelatine in one-half cupful of cold water for one hour; put the water and celery in a double boiler on the fire and simmer one-half hour; add the salt, pepper, and soaked gelatine and stir until it is dissolved; remove from fire, add Panopepton; stir, and strain through linen into a jelly-jar, and set near ice. Serve in small quantities.

Panopepton Jelly with Orange.

One-half (½) of a small box best Gelatine.
One tablespoonful.....Sugar.
Six tablespoonfuls.....Panopepton.
The juice and peel of one.....Orange.
One pint.....Cold Water.

Put the gelatine, orange peel (cut in small pieces), orange juice and cold water in a dish, and let it stand for one hour, then put in a double boiler on the fire, add the sugar and stir until it is dissolved; now strain through linen, add the Panopepton and stir well. Pour into a jelly jar and set near ice. Serve in small quantities.

Panopepton, Hot.—To a small teacup two-thirds full of boiling water add one tablespoonful of Panopepton, and one teaspoonful of *fresh* lemon

juice—a little sugar, if desired—stir. Drink immediately, sipping slowly.

Panopepton Bouillon, Hot.—Put one tablespoonful of Panopepton into a small teacup; fill the cup nearly full of boiling water, and flavor to taste with celery salt, or plain salt and pepper; stir, and sip slowly.

Panopepton Cordial.—Put into a cordial glass—or any small glass—two teaspoonfuls of clean crushed ice; add one teaspoonful of Fairchild's Essence of Pepsine and three teaspoonfuls of Panopepton. Sip slowly.

Panopepton with Whey.—Put into a small teacup one or two teaspoonfuls of clean crushed ice; add one tablespoonful of Panopepton, stir, then fill the cup with whey. Drink slowly.

Recipes for Preparing Peptonised Foods By the Fairchild Methods.

To peptonise food is to artificially digest it, to submit it to the action of the digestive enzymes under proper conditions until it becomes soluble just as in the natural digestive process.

The changes which the various food substances undergo in being peptonised are as evident to sight and taste as are the effects of cooking; the fibre of beef gradually softens and dissolves; well-boiled gel-

atinous starch (gruel) quickly becomes thin and watery; farinaceous foods as ordinarily prepared, oatmeal, wheaten grits, rice, dipped toast, etc., also become softened and gradually converted into soluble forms. Albuminous substance, the casein of milk, for instance, acquires, when fully digested, the somewhat bitter taste of peptone; farinaceous foods become sweeter as maltose (starch-sugar) is developed.

Peptonised Milk. (Immediate Process.)—Put two tablespoonfuls (1 oz.) of cold water into a goblet or glass; dissolve in this one-quarter of the contents of a Peptonising Tube (Fairchild); add eight tablespoonfuls (4 ozs.) of warm milk—not boiling; drink immediately, sipping slowly.

To prepare half a pint of milk, use half the contents of a Peptonising Tube, 4 tablespoonfuls of water, a half pint of milk.

Peptonised Milk. (Cold Process.)—Put a teacupful (gill) of cold water into a clean quart bottle and dissolve in it by shaking thoroughly the powder contained in one of the Peptonising Tubes (Fairchild); add a pint of cold fresh milk, shake the bottle again, and *immediately* place it on ice—directly in contact with the ice.

The bottle should always be well shaken before and after pouring out a portion.

Peptonised milk prepared by this recipe is espe-

cially appreciated by patients who dislike the taste of warmed or boiled milk, and ordinarily it is readily digested and assimilated.

Partially Peptonised Milk.—Put a teacupful (gill) of cold water and the powder contained in one of the Peptonising Tubes (Fairchild) into a clean saucepan, and stir well; add a pint of cold, fresh milk, and heat, with constant stirring, to boiling point. The heat should be so applied that the milk will come to a boil in ten minutes. Let it cool to about lukewarm, then strain into a clean bottle or glass jar, cork tightly and keep in a cold place. The bottle or jar should always be well shaken before and after pouring out a portion. The milk may be taken cold or hot as the physician may direct.

Peptonised Milk. (Warm Process.)—Put a teacupful (gill) of cold water and the powder contained in one of the Peptonising Tubes (Fairchild) into a clean quart bottle and shake thoroughly; add a pint of cold, fresh milk and shake again; then place the bottle in a pail or kettle of warm water—about 115° F., or not too hot to immerse the whole hand in without discomfort. Keep the bottle in the water bath for five or ten minutes, or longer if it be desired to peptonise the milk quite completely, then put it *immediately* on ice—directly in contact with the ice—in order to check digestion and keep the milk from spoiling.

The degree of peptonisation is very simply regulated in this process by the length of time during which the milk is kept in the water bath.

Specially Peptonised Milk. (For making Milk Jelly, Milk Punch, Milk Lemonade, and for Use with Fruit Juices or Acids.)—Peptonise a pint of milk by the "Warm Process," keeping the bottle in the water bath for *one hour;* pour the peptonised milk into a saucepan and *heat to boiling,* when it is ready for use if it is required hot; or it may be put on ice, in a bottle or any suitable container, to be used for punches, lemonade, etc.

It is necessary to peptonise the milk quite completely—for one hour—so that it will not curdle when mixed with lemon juice or acid. The bitter taste of this "specially peptonised milk" is not evident in the jellies, punches, etc., and these foods are very agreeable and exceedingly assimilable.

Peptonised Milk Jelly.

1 pint "specially peptonised milk," hot,
½ box best gelatine,
sugar to taste,
rinds and juice of one fresh lemon and orange,
2 or 3 tablespoonfuls best St. Croix rum, or brandy, etc.

Soak the gelatine in a teacupful of cold water, pour the hot milk over it and add the sugar; stir

until dissolved, then throw in the lemon and orange rinds.

Squeeze the juice of the lemon or orange into a glass and strain; stir in the rum or brandy, etc., then mix with the milk and gelatine; strain.

When the mixture has cooled to a syrup so as to be almost ready to set, pour into moulds or glasses wet in cold water and put on ice or in cold water or in a cold place to harden; if it is too warm when poured into the moulds, it is apt to separate in setting.

Peptonised Milk Punch.—Take a goblet about one-third full of finely crushed ice, add a tablespoonful of St. Croix rum, a dash of curacao, or any liqueur that is agreeable to the taste; fill the glass with "specially peptonised milk," stir well and grate a little nutmeg on top.

"Specially peptonised milk" may be used in the same way as fresh milk in making punches—with St. Croix rum or Jamaica, or any spirits that may be preferred.

Peptonised Milk Lemonade.—Take a goblet one-third full of finely crushed ice; add the juice of a lemon, and sugar to taste; fill the glass with "specially peptonised milk" and stir well.

If preferred, equal parts of the peptonised milk and mineral water may be used instead of milk alone, the mineral water being first poured on the

ice and then the milk added; this makes a very agreeable effervescing punch.

Hot Peptonised Milk as a Beverage.—Hot peptonised milk is a grateful and nourishing beverage for invalids, dyspeptics, diabetics and consumptives. In many cases, it is most helpful in the morning, taken upon rising, or with breakfast, and it is excellent at any time when one suffers from exhaustion with intolerance of solid food. There is nothing better in the way of nourishment to take before retiring than hot peptonised milk, and at the table it is a good substitute for tea or coffee.

Peptonised Milk with Cereals.—Oatmeal, rice, hominy, etc., are more readily digestible when taken with peptonised milk, and its use with the various cereals is especially recommended for young children and children with defective digestion.

Peptonised Milk Gruel.—Mix a half-pint of well-boiled, hot gruel with a half-pint of cold, fresh milk and strain into a pitcher or jar; add immediately the powder contained in one of the Peptonising Tubes (Fairchild) and stir until it is dissolved. Put the pitcher or jar in a hot water bath or warm place for five minutes; then pour the mixture into a clean bottle and place on ice; serve hot or cold.

The gruel may be made from arrowroot, wheat flour, barley, or oatmeal, etc.; but in each instance the farinaceous material should be boiled with water

until the starch granules are thoroughly swollen and broken up.

Partial Digestion of Farinaceous Foods at the Table.—To a dish of well-cooked porridge of oatmeal, wheaten grits, or rice, etc., as warm as agreeable, add one or two teaspoonfuls of Diazyme Essence and stir for a few minutes, until thoroughly mixed.

The food must not be hotter than can be agreeably borne by the mouth, or the digestive principle will be destroyed.

Extractum Pancreatis may be used in the same manner, a measureful of the dry powder instead of a teaspoonful of Diazyme Essence. This powder imparts no taste or odor to the food and is handy to use. It contains also the other digestive principles—those capable of digesting milk, fat, etc., and thus aids in the digestion of the foods taken with the cereal.

Peptonised Oysters. (Originally suggested by Dr. N. A. Randolph.)—To a half dozen large oysters with their juice add a half-pint of cold water; heat in a saucepan to boiling and boil briskly for a few minutes; pour off the broth and set it aside.

Mince the oysters finely and reduce to a paste with a potato masher, in a wooden bowl; put in a glass jar with the broth and add

Extractum Pancreatis .....3 measures* (15 grs.)
Soda Bicarbonate .....1 measure (15 grs.)
mixed thoroughly into one powder.

Let the jar stand in hot water or in a warm place, where the temperature is not above 115° F., for an hour and a half. Then pour into a saucepan, stir in a half-pint of milk and heat slowly to boiling point. Season to taste and serve hot.

The boiling is essential—to prevent further digestion and keep the broth from spoiling.

If heated gradually, the milk will be sufficiently digested before the mixture boils.

The very small bits of oyster that remain undissolved may be strained out, or rejected in eating the soup, but are rarely unacceptable to the stomach.

New Recipes and New Methods of Cooking.

The following recipes represent a collection which has been tested, and they are to be considered practically by the reader as well as dietetically. Some have been especially adapted to the newer methods of cooking, and particularly to the electrical cooking and nursery devices now so much used for comfort and sanitary reasons, in both nursery and kitchen. Apropos of the sanitary consideration of the atmosphere of our homes the remarks of Robert

* Measures are in the carton with each oz. package of Extr. Panc., one containing 5 grs. for the Extr. Panc. and one containing 15 grs. for the soda bicarb.

Hammond, of London, should be of interest and pertinent. He says: "All older forms of lighting (to which we may now add heating) are condemned by one common fault, consumption of oxygen and pollution of the atmosphere. With electricity we have no noxious fumes added to the air; no ravages to be repaired at heavy cost to health; no absorption of life-giving oxygen surrounding us, so essential to health, etc., etc."

In "Good Housekeeping," in a well-written article on "Cooking in the Modern Way," Emmett Campbell Hall calls special attention to the value of electricity in this field. Thomas Edison, at the present writing, declares in an article in the *N. Y. Times,* that electricity is the coming heat for home use, and that the old-fashioned cook stove will be a forgotten relic. A few quotations from Mr. Hall's paper may be of interest to the general reader before we go on with our recipes and their preparation. He says: "A generation ago it did not seem so necessary to consider the question of the comfort of the cook as it does to-day, for most of the cooking was done by servants, who accepted the discomforts as natural to their occupation. Then, too, kitchens were generally large rooms, with plenty of windows, not likely to become intolerably hot. But conditions have changed remarkably, especially in the large cities. In

the need to economize space, the average kitchen has been reduced in size until in many apartments it is little more than a closet. To many apartment dwellers servants are out of the question, and the cooking for the family must be done by a wife or daughter. One of the solutions of the cooking problem seems to be found in the electric heating devices, which have at last been brought to such a degree of perfection as to be practical and usable household appliances. Their great attraction lies in the fact that they make cooking really clean and cool. The operation may be made so dainty that it can be carried on in the dining-room itself, for, in electric cooking, there is neither ash, soot, smell, flame, nor gas of any kind, and there is not, of course, any handling of fuel." It may also be pointed out that there is no danger connected with these devices if they are properly handled, and by reason of the fact that no heat is thrown off by the electric processes, cooking may be done anywhere, even in the sick-room, without danger to the patient, and certainly in the nursery, where its need is constant.

Many of my readers may think that electricity is available only in large cities like New York. Mr. Hall points out in this connection that, oddly enough, electricity is frequently available in most remote places, along electric railways, near mines and in small towns where there is no gas plant, so

that a country cottage may fit itself up with more modern, scientific and attractive cooking devices than are to be found in many wealthy city homes. But, it is to the dweller in the tiny city flat that electric cooking is perhaps the greatest boon, and as this little book reaches many readers in such tiny flats I hope they will take these suggestions to heart and see whether they cannot improve on present conditions in their homes—so far as the atmosphere, at least, is concerned, and take care to keep it pure, whether using gas or electricity, especially where infants and invalids are struggling to keep alive. They may think the expense of electric cooking a question to consider, but even that is nothing to speak of when the gain is considered. When gas was first used for cooking it was commonly heard that the expense was too great. The convenience of its use soon compelled a different attitude, and it became evident before long that it was often cheaper than coal if carefully used. The same course of development is now occurring in electric fields and as time goes by it will become a matter of choice or opportunity and not of expense, whether one or the other is used. If an electric stove is properly installed and *properly used*, the expense is equivalent to using gas at $1.50 per one thousand feet if the current is 5c. A simple explanation is given below by which the cost of electric

cooking or heating may be computed. Electricity is sold by the kilowatt-hour at a charge varying from 5 cents to 20 cents.

A kilowatt-hour is equal to 1000 watt-hours, and one watt-hour means that energy is used at the rate of one watt for one hour. Thus, if 50 watts were used for ten hours, 500 watt-hours (50 times 10) would express the amount of energy expended; 500 watt-hours is ½ of 1,000 watt-hours, or ½ kilowatt-hour, since one kilowatt-hour is equal to 1,000 watt-hours.

The rate at which energy is used by any apparatus, that is, the number of watts it is using, may be found by simply multiplying the current strength (amperes) in it, as marked on the utensil, by the electric pressure (volts) across it, also stamped on the article's nameplate. In this way, a heater marked 5 amperes, and 100 volt circuit, would transform electrical energy at the rate of 5 times 100—namely, 500 watts or ½ kilowatt. If this heater were run for two hours it would use 2 hours times ½ kilowatt—namely, 1 kilowatt-hour of energy. At 5c. per kilowatt-hour it would therefore cost 5c. to run this heater for two hours.

Summing up—

Volts times amperes equals watts.

Volts times amperes divided by 1,000 equals kilowatts.

Volts times amperes times hours divided by 1,000 equals kilowatt-hours,
and
Kilowatt-hours times cost per kilowatt-hour equals total cost of operating.

Table of Cost of Running Electrical Heating Apparatus of Different Watt-Consumption, at Different Rates per Kilowatt-hour for One Hour.

RATE PER KILOWATT HOUR

Wattage of apparatus	5c.	10c.	15c.	20c.
100	½c.	1c.	1½c.	2c.
200	1c.	2c.	3c.	4c.
500	2½c	5c	7½c.	10c.
1000	5c.	10c.	15c.	20c.
1500	7½c	15c.	22½c.	30c.
2000	10c.	20c.	30c.	40c.

Example:—

To find the cost of cooking an egg for ten minutes in an electric saucepan.

If you pay 10c. per kilowatt-hour for current, and your saucepan consumes electricity at the rate of 500 watts, the cost opposite 500 watts in the 10c. column (above), or 5c., gives the cost of operating the saucepan one hour. The ten minutes you re-

quire to cook an egg is one-sixth of an hour, hence the cost of running is one-sixth of that for one hour, namely, one-sixth of five cents, or five-sixths of one cent to cook an egg for ten minutes.

Special adaptation of electric heating may be made to processes taken up on the pages given below of "Children's Diet" by using certain utensils mentioned that have been found to be well fitted for the purpose. Their use will lend to the comfort of the mother or nurse, and will certainly not be detrimental to the child or invalid. On pages 21 and 22, where mention is made of the care of bottles, note may be made that the electric sterilizer used by dentists and surgeons would be an admirable contrivance for sterilizing baby's bottle, and all utensils of the sick-room which require sterilization.

The application of electric heat to the sterilizer has made its operation both convenient and sanitary in the highest degree. Absolute cleanliness is possible. It is odorless and safe, hence is particularly suitable in the nursery.

It contains a perforated tray, on which the bottles rest, and which can be lifted out at will. After the current is turned on no other attention is necessary.

On page 33 mention is made of difficulty in keeping warm the early morning bottle. A Hygeia nursery bottle (see page 49 in "How to Feed Chil-

dren"), and an electric warmer, as here illustrated, will be found a comfort, if electricity is available.

Nursery Milk Warmer.

When milk is warmed over fire in the ordinary way the heat is applied to one spot only—the bottom of the vessel. Unless the milk is stirred instantly it becomes uneven in temperature, being hottest at the bottom and coolest at the top. Before it is all brought to the right warmth, part of it is likely to be overheated and thus rendered indigestible.

The Nursery Milk Warmer consists of a coil tube heater, that surrounds the glass "Hygeia" nursing bottle, and heats the water in which it is immersed evenly and quickly. Both coil and bottle are set in the nickel-plated receptacle. The milk heats within three minutes after the current is turned on. It costs less than ¼ of a cent to warm baby's milk this way. These milk warmers are strongly recommended by physicians, and the Hygeia bottle was designed by a physician.

On page 54 mention is made of the necessity for making food inviting to tempt a fretful child to eat. A child may be shown how to make delicious toast, on the table, on an electric toaster, and be tempted to eat it, even if hard to please on a hot morning;

and if once allowed to use the toaster in this way, any mother will find how willing an ailing child will be to repeat the process, and perhaps eat a little, with benefit, when otherwise it might not care to eat anything at its regular hour for meals, yet later grow hungry and disturb a habit of regular eating by wanting food between meals.

On page 107 special attention should be given to the ease with which the Hygeia bottle and the electric warmer may be used to warm, or even prepare beef juice, without coagulation. It is in the exactness of the heat that the great value often lies in electrical usage.

On page 238 will be found a method for drying cooked rice. Where an ordinary stove or a gas oven is available, it can be used equally well. Where electricity is used, a warming plate oven will answer.

Traveler's Electric Stove.

This little outfit enables the traveler to make tea or coffee, prepare cereals, boil eggs, or have hot

water at any time in any room where there are electric lights. The heater used alone is excellent for toasting or warming light food. Anyone traveling with children or invalids will find this stove a convenience that by day or night makes special service unnecessary.

All parts pack within the cup occupying a space 3¼ x 5 inches. The stove is oxidized steel with a white enamel frame, and is connected with six feet of cord and an adaptable plug that fits any lamp socket. An asbestos mat is furnished, so that the stove can be used without the slightest risk of the heat injuring a polished table.

The cup is nickel heavily tinned inside, and has a capacity of a pint and a half. The bottom is slightly recessed, so that the cup fits down over the stove and makes a good heating contact that saves current and gets quick results, and it can be run for 2½ cents an hour.

The above suggestions should show how any clever woman may facilitate in various ways all cooking or other household work if she will simply master the few points necessary to make a beginning in her scientific experiment. After that, the charm and ease of the work will carry her along unaided.

Nursery Recipes.

Taken from "Recipes for the Elcctric Chafing Dish." These Recipes may be Adapted to any Method of Heating a Chafing Dish.

Salted Almonds.—Half pound of almonds, tablespoonful of butter or olive oil, salt. Shell, blanch and dry the almonds; heat the butter or oil in the Chafing Dish, then add the almonds; cook to a delicate brown; shake the dish constantly and stir often to keep from burning; drain the almonds and dry on soft paper; then sprinkle with fine salt.

Creamed Chicken.—Two cups of cold chicken cut into small pieces, one cup of chicken stock, one cup of milk or cream, two tablespoonfuls of butter, one heaping tablespoonful of flour, salt and pepper. Cook the butter and flour together in the Chafing Dish; add the stock and milk, and stir until smooth; put in the chicken; salt and pepper, and cook three minutes longer.

Blanquette of Chicken.—One pint of cold chicken cut in dice or small pieces, one tablespoonful of butter, one heaping tablespoonful of flour, one-half cup of white stock, yolk of two eggs, one-half cup of cream, parsley, salt, pepper, lemon, nutmeg. Stir the butter into the flour; before it browns add the stock; stir a minute; add a little lemon juice, white pepper, salt, slight grating of nutmeg, and cream; boil up once and add the chick-

en. Use the low heat and simmer eight minutes, then add the eggs well beaten; stir in chopped parsley and serve at once.

Scrambled Eggs.—Five eggs, one tablespoonful of butter, one teaspoonful of salt, and a pinch of white pepper. Beat the eggs in a bowl enough to blend the white and yolks; melt the butter and turn in the eggs; stir until thick and smooth; season with the salt and white pepper.

Scrambled Eggs with Tomato.—Five eggs, cupful of tomato, salt and pepper. To the eggs, started as before, add a cupful of canned tomato, drained and chopped fine. Serve directly from the pan into hot plates. Chopped ham or bacon (in place of oysters or tomatoes) makes an appetizing dish.

Plain Omelet.—Four eggs, four tablespoonfuls of milk, walnut of butter. Break the eggs into a bowl with the milk and whip thoroughly; put the butter in the Chafing Dish, and when very hot run the eggs into it, allowing it to cook until thick; use a thin-bladed knife to loosen it from the bottom, but do not stir it; when done, carefully roll the edges over until all rolled up. Serve on a hot plate.

Cheese Omelet.—Make the same as plain omelet, and as soon as it begins to thicken sprinkle in three tablespoonfuls of grated cheese.

Stirred Eggs.—One gill of rich gravy, five eggs, one tablespoonful of butter, one tablespoonful of minced parsley, one-half teaspoonful of salt, one-half saltspoonful of white pepper. To the melted butter add the gravy, and when hissing hot stir in the beaten eggs until they thicken; season and sprinkle with minced parsley. Serve on toast.

Salt Codfish.—One-half pint of desiccated codfish, two tablespoonfuls of butter, one tablespoonful of flour, one gill of cream and a little pepper. Put the butter into the Chafing Dish; when melted add the flour, stirring constantly; then put in the codfish, which has been previously soaked for an hour in tepid water; add the cream and a little pepper; let all simmer ten minutes, stirring constantly.

Chicken Halibut.—One cupful of cold boiled halibut, two hardboiled eggs, one cup and a half of milk, butter size of an egg, crumbs of four biscuits (crackers), salt, pepper. Shred the halibut with a fork; put the milk into the food pan with hot water below, and let it come to a boil; add butter, salt and pepper, then the cracker crumbs, and lastly the halibut; let it cook five minutes, then add the eggs chopped fine, and serve on a hot platter with bits of buttered toast.

Stewed Oysters.—Two dozen good-sized oysters, one and one-half pints of milk, a walnut of butter, one-half teaspoonful of salt and dash of

white pepper. Boil the milk in Chafing Dish; add the oysters, butter, salt and pepper; allow it to just come to a boil, then serve. Above is sufficient for four.

Creamed Oysters.—One pint of milk, one-half tablespoonful of butter, one-half tablespoonful of flour, one-half teaspoonful of salt, one pint of oysters, nutmeg. When the milk boils, stir into it the butter into which the flour has been rubbed; season with a slight grating of nutmeg, and salt; when creamy, add the oysters without their liquor; allow them to be just heated through, and serve on thin strips of buttered toast.

Pan Roast.—One dozen large oysters, one-half pint of oyster liquor, one tablespoonful of butter, salt and pepper. Melt the butter in the Chafing Dish, and as it creams add the oysters, liquor, salt and pepper; cover and cook about two minutes. Put six of the oysters on a thin slice of toast, with sufficient liquid to moisten the toast, and serve.

Sweetbreads with Peas.—Can of peas, three small sweetbreads, one teaspoonful of butter, one-half pint of stock broth, celery leaf, salt, white pepper, one-half teaspoonful of brown flour. Stand the sweetbreads in cold water for an hour; then parboil and remove rough edges, membranes, sinews, etc.; put in cold water and keep on ice until wanted; put into the Chafing Dish the butter and

the sweetbreads. When the butter has been absorbed add one-half pint of stock and the celery leaf, chopped fine, the salt, pepper and browned flour; turn the sweetbreads; when the same is reduced one-half it is ready; when cooking, open a can of green peas; warm thoroughly in the Chafing Dish; put in salt, pepper, and a tablespoonful of butter. Serve peas and sweetbreads together.

Lamb with Tomato.—One pint of lamb stock, one-half pint of canned tomato chopped fine, one pint of cold lamb cut in dice, one tablespoonful of butter, one teaspoonful of onion juice, white pepper and salt. Boil the stock, then add the butter, pepper, salt, onion and tomato; boil and then put in the lamb, and simmer a few minutes.

Lamb Chops.—Small lamb chops, butter, salt, Rub inside of Chafing Dish with butter; let it get very hot, so it will at once sear the chops and prevent the escape of the juice. Turn them often while cooking.

Fricassee of Dried Beef.—One cup of beef finely chopped, one tablespoonful of butter, two eggs, one-half pint of milk. Melt the butter in the milk; add the beef, and cook five minutes, then put in the beaten eggs, slowly, and stir until the sauce is thick. Serve on toast.

Dried Beef.—One-half pound of dried beef, two tablespoonfuls of butter, one-half pint of milk, one

tablespoonful of flour. Put the butter in the Chafing Dish and add the beef; fry until brown, then add the milk; cream the flour with a little cold milk, then stir it in. Serve on toast.

Creamed Potatoes.—One pint of cold potatoes cut in cubes or thin slices, milk, one tablespoonful of butter, one-half teaspoonful of pepper, chopped parsley. Put the potatoes in the Chafing Dish and cover with milk, and cook until the milk is absorbed; then add the butter, salt, pepper and parsley. Stir a few moments and serve.

RECIPES

The following list is a summary of the recipes given throughout the book, with pages specified.

	Page		Page
Meat broths	104, 107	Stewed celery	138
Vegetable soups	102	Cauliflower	134
Chicken broth	105	Peas	134
Barley broth	105	Beans	134
Broiling meats	124	Asparagus	135
Panning meats	125	Tomatoes	135
Boiling meats	126	Beets	136
Meat stew	126	Apple sauce	136
Roast beef	127	Brussels sprouts	137
Sweetbreads	127	Fruit gelatin	162
Eggs, boiled	128	Fruit corn starch, or blanc-mange	148, 150
Fish, broiled	130	Junket	160
" creamed	130	Baked Apple	160
" boiled	130	Yellow or white custards	161
" baked	130	Soft custard	161
Oysters	131	Cup custard	161
Squabs	131	Fruit-juice custards	162
Chicken	131	Gelatin desserts	162
Turkey	131	Irish-moss blanc-mange	163
Partridge	131	Milk-soup	105, 108
Pheasant	131	Beef juice	106
Vegetable omelet	131	Beef essence	107
Cereals	113	Beef or mutton tea	107
Barley gruel	114	Veal broth	107
Bread	119	Mutton and veal broth	107
Moravian cake	123	Chicken custard	108
Zwieback	122	Oyster broth	109
Macaroni	140	Clam broth	109
Corn	137	Potato soup	109
Rice	138	Savory jelly	109
Potatoes	139		
Spinach	132		
Stewed onions	132		

	Page
Roast beef gravy	110
A home-made meat powder	110
Egg custard without milk	110
Tapioca with chicken or meat jelly	111
A savory breakfast custard	112
A recipe for invalids	112
Poached eggs	112
Oatmeal gruel	113
Farina gruel	114
Cream gruel	114
Browned flour gruel	115
Arrowroot gruel	115
Malted gruel	115
Oatmeal porridge	116
Wheat porridge	116
Hominy	116
Cornmeal mush	116
Farina porridge	117
Oatmeal blanc-mange	117
Oat jelly (Rotch)	117
Cream muffins	118
Graham and cornmeal muffins	118
Cornmeal mush	118
Cranberries	145
Date sandwiches	145
Grape juice	147
Blackberry jelly	147
Brown Betty	149
Fruit tapioca pudding	149
Strawberry custard	149
Raspberry blanc-mange	150
Cherry jelly	150
Rhubarb and orange jam	150
Dates and cream	151
Jellied apples	151
Apple snow	151
Rhubarb jelly	151
Rhubarb mould	152
Rhubarb jam	152
Orange jelly	152
Sago jelly	152
Prune jelly	153
Clarified apples	153
Apple water	153
Irish moss tea	153
Fruit sauce	154
Marshmallow drops	154
Orange syrup	155
Lime water	155
Rice water	155
Rice milk	155
Bread jelly	156
Mulled egg	156
Maple molasses gingerbread	156
A wholesome sponge cake	156
Rice pudding, with eggs	157
Rice pudding without eggs	157
Snow pudding	158
Bread pudding	158
Koumyss	158
Wine whey	159
Barley water, with white of egg	159

INDEX.

ABERNETHY, Dr. John, on amount of food necessary for the needs of the economy, 2
Adams, Dr. Samuel, on daily naps for children, 33
Anæmic children, diet for, 74
Antidotes for poisons, 77
for antimonial wine, 78
for aqua fortis, 78
for arsenic, 78
for bedbug poison, 78
for bicarbonate of potassium, 78
for blue vitriol, 78
for carbolic acid, 78
for carbonate of sodium, 79
for caustic potash, 78
for caustic soda, 78
for chloral hydrate, 78
for chloroform, 78
for cobalt, 79
for copperas, 79
for corrosive sublimate, 78
for Fowler's solution, 78
for hydrochloric acid, 78
for laudanum, 79
for lead-water, 78
for morphine, 79
for nitrate of silver, 79
for nux vomica, 79
for oil of vitriol, 78
for opium (paregoric), 79
for oxalic acid, 78
for red precipitate, 78
for saltpetre, 78
Antidotes for strychnine (rat and beetle poison), 79
for sugar of lead, 78
for sulphate of zinc, 78
for tartar emetic, 78
for vermilion, 78
for volatile alkali, 78
for white precipitate, 78
Antimonial wine, treatment of poisoning by, 78
Apple, baked, as an appetizer, 144
clarified, recipe for, 153
how to bake, 160
jellied, recipe for, 151
sauce, recipe for, 136
snow, recipe for, 151
Apple-water, recipe for, 153
Aqua fortis, treatment of poisoning by, 78
Arrowroot gruel, recipe for, 115
Arsenic, treatment of poisoning by, 78
Artificial feeding of infants, Dr. Eustace Smith on, 3
Asparagus, method of cooking, 135
Atwater, Professor, on composition of foods, 51

BABY, the, Dr. Jacobi on good food for, 17
Barley broth, recipe for, 106
gruel, recipe for, 114

Barley-water with white of egg, recipe for, 159
Beans, method of cooking, 135
Bedbug poison, treatment of poisoning by, 78
Beef broth, recipe for, 104
essence, recipe for, 107
juice, recipe for, 106
roast, gravy, recipe for, 110
method of cooking, 127
tea, recipe for, 107
Beets, method of cooking, 136
Bicarbonate of potassium, treatment of poisoning by, 78
Blackberries, use of, 144
Blackberry jelly, recipe for, 147
Blancmange, oatmeal, recipe for, 117
raspberry, recipe for, 150
Blue vitriol, treatment of poisoning by, 78
Bottles, nursing, care of, 21
Bread and milk, an ideal supper, 66
jelly, recipe for, 156
pudding, recipe for, 158
recipe for making, 119
Breakfast combinations for winter, 47
custard, savory, recipe for, 112
menus for child of five or six years, 47
Breakfasts, cool morning, 64
summer, 53
for child of three to five years, 45
Bronchitis, diet in, 75
Broth, barley, recipe for, 106
beef, recipe for, 104
chicken, recipe for, 105, 108
clam, recipe for, 109
Broth, mutton and veal, 107
oyster, recipe for, 109
veal, recipe for, 107
Broths, use of vegetables in, 102
Brown Betty, recipe for, 149
Browned flour gruel, recipe for, 115
Bruen, Dr. Edward T., on digestion, 67
Brussels sprouts, method of cooking, 137
Burnet, Dr. R. W., on foods in illness, 74
Butter, age to allow, 31

CAKE, should never be given to infants, 62
Moravian, recipe for, 123
Candy, should never be given to infants, 62
Carbohydrates, 51
Carbolic acid, treatment of poisoning by, 78
Carbonate of sodium, treatment of poisoning by, 79
Carrots, method of cooking, 134
Cauliflower, method of cooking, 134
Caustic potash, treatment of poisoning by, 78
soda, treatment of poisoning by, 78
Celery, method of cooking, 133
Cereals, necessary for growing children, 27
should be exposed to prolonged heat in cooking, 27
use of sugar with, 63
Cherries, use of, 144
Cherry jelly, recipe for, 150
Chicken broth, recipe for, 105, 108
custard, recipe for, 108
roasted, portions to use, 131

Children, adult food unsuitable for, 1
after thirty months old food for, 39
amount of food necessary for, 2
anæmic, diet for, 74
cereals necessary for promoting growth of, 27
convenient daily routine for, 33
development of, retarded by use of improper food, 1
dinner menus allowable for, after thirty months, 40
disease likely to follow improper feeding of, 1
five years old, week's menus for, 41
five or six years old, breakfast menus for, 47
Fonssagrives on prevention of disease in, 68
food idiosyncrasies of, importance of ascertaining, 3
Froebel, on proper food as a factor in the development of, 7
fourteen to fifteen months old, menu for, 35
alternating menu for, 35
necessity of selection of food for, 1
night feeding of, 34
nineteen months old, menu for, 37
alternating menu for, 37
seventeen to eighteen months old, menu for, 36
alternating menu for, 36
Children, three to five years old, suggestions for breakfast in summer for, 45
summer dinner menus for, 45
twelve months old, Dr. Rotch's suggestions for feeding, 30
twelve to thirteen months old, menu for, 32
alternating menu for, 34
twenty to thirty months old, menu for, 38
use of animal food in diet of, 29
variation in food to meet changed conditions in, 2
waste and repair in, 1, 2
young, Sir Henry Thompson's rules for feeding, 29
Chloral hydrate, treatment of poisoning by, 78
Chloroform, treatment of poisoning by, 78
Clam broth, recipe for, 109
Clarified apples, recipe for, 153
Cobalt, treatment of poisoning by, 79
Cold weather, use of heat-producing foods in, 3
Cool morning breakfasts, 64
Copperas, treatment of poisoning by, 79
Corn, method of cooking, 137
Corn omelet, recipe for, 56
Cornmeal muffins, recipe for, 118
mush, recipes for, 116, 118
Corrosive sublimate, treatment of poisoning by, 78
Cranberries, method of cooking, 145
Cream gruel, recipe for, 114

Cream muffins, recipe for, 118
Cup custards, recipes for, 161
Custard, chicken, recipe for, 108
cup, recipe for, 161
egg, without milk, recipe for, 110
savory breakfast, recipe for, 112
strawberry, recipe for, 149

DAINTY service, importance of, 54
Dates, use of, 145
and cream, recipe for, 151
Davis, Dr. Edward T., on rate of increase of weight of infant, 12
Dentition, second, sample dinner menu for period of, 48
Desserts, 149
summer, use of, as supplementary foods, 57
Diarrhœa, diet in, 75
Diet, a sample school, 86
convalescent, 73
for anæmic children, 74
for nursing mother, 10
abstention from stimulants, 10
malt extracts, 11
meat, 10
milk at night, 11
Dr. Rotch on, 11
for school children, 79
in illness, 71
light, 71
liquid, 71
necessity for, to be well balanced, 3
preventive, 68
Sir Henry Thompson on disease caused by errors in, 7
summer, 52
Digestion, process of, 67
Digestive power, weakened, modification of food to suit, 3
Dining-room, cool-looking, 55
Dinner menu, sample, for period of second dentition, 48
menus, summer, for children from three to five years old, 45
Dinners, simple, 56
Diphtheria, diet in, 75
Disease, Fonssagrives on prevention of, in children, 68
infected milk a means for transmission of, 17
liable to follow improper feeding of children, 1
Sir Henry Thompson on errors of diet as a cause of, 7
Dutton, Professor, on school gardens, 98
on school luncheons, 95

EGG custard without milk, recipe for, 110
mulled, recipe for, 156
poached, recipe for, 112
Eggs, when to allow, 31
Exercise for nursing mother, 9

FARINA gruel, recipe for, 114
porridge, recipe for, 117
Feeding, substitute, intervals and amounts, 22
Dr. Rotch's table for, 23
Feeding tube, graduated, 24
Figs, use of, 145
Fish, method of cooking, 130
Fonssagrives, on method of cooking eggs, 72
on prevention of disease in children, 68

Fonssagrives, on rules in illness, 69
Food, amount of, necessary for children, 2
animal, in diet of children, 29
Dr. Abernethy on amount of, necessary for the needs of the economy, 2
heat-producing, suitable for cold weather, 3
in illness, preparation of, 4
Fonssagrives' rules for, 69
liquid, in hot weather, 3
proper, as a factor in the development of children, 7
reasons for a study of the uses of, 1
undigested, manner in which harm is caused by, 5
variation in, to meet changed conditions in children, 2
Food action, reasons why a mother should understand the principles of, 3
Food-idiosyncrasies of children, necessity of ascertaining, 3
Foods, forbidden, 49
nursery, classes of, 50
quantities to allow, 28
salt-giving, 52
starch, home preparation of, for infants, 15
supplementary, use of summer desserts as, 57
Fowler's solution, treatment of poisoning by, 78
Freeman, Dr. Rowland Godfrey, apparatus for heating milk, 19
on night feeding of infants, 12
Froebel, Friedrich Wilhelm August, on proper food as a factor in the development of children, 7
Fruit, how to use, 31, 59
place of, in the nursery diet, 141
sauce, recipe for, 154
tapioca pudding, recipe for, 149

GARDENS, school, Professor Dutton on, 98
Gee, Dr., on prevalence of rachitis, 67
Gelatin, use of, 162
Gingerbread, maple molasses, recipe for, 156
Graham muffins, recipe for, 118
Grape juice, method of preparing, 147
Grapes, use of, 144, 146
Gross, Dr. Samuel D., on diet for the sick, 71
Growth of infants, normal increase of, 12
Gruel, arrowroot, recipe for, 115
barley, recipe for, 114
browned flour, recipe for, 115
cream, recipe for, 114
farina, recipe for, 114
malted, recipe for, 115
oatmeal, recipe for, 113

HEALTH, preservation of, Herbert Spencer on, 7
Hominy, method of preparing, 116
Hot weather, use of liquid food in, 3
Hydrocarbons or fats, 52
Hydrochloric acid, treatment of poisoning by, 78

Illness, diet in, 67
convalescent, 73
light, 72
liquid, 71
Fonssagrives' rules in, 69
preparation of food in, 4
Infants, artificial rearing of, Dr. Eustace Smith on, 3
daily naps of, 33
home preparation of starch foods for, 15
how to feed, during the first two or three days, 11
ideal conditions for nursing, 9
increase of weight of, an index to nutrition, 12
night feeding of, Dr. Freeman on, 12
normal increase of growth of, 12
size of stomach of, at birth, 25
weaning, proper time for, 13
Invalids, Dr. S. Weir Mitchell's recipe for, 112
Irish moss tea, recipe for, 153

Jacobi, Dr. Abraham, on good food for a baby, 17
Jam, rhubarb, recipe for, 152
rhubarb and orange, recipe for, 150
Jellied apples, recipe for, 151
Jelly, blackberry, recipe for, 147
bread, recipe for, 156
cherry, recipe for, 150
oatmeal, recipe for, 117
orange, recipe for, 152
prune, recipe for, 153
rhubarb, recipe for, 151
sago, recipe for, 152
savory, recipe for, 109
Junkets, recipes for, 160

Koumyss, recipe for, 158

Laudanum, treatment of poisoning by, 79
Lead-water, treatment of poisoning by, 78
Lime-water, recipe for, 155
Luncheon, school, 89
in Philadelphia Normal School for Girls, 91

Macaroni, method of cooking, 57
use of, 59, 140
Malt extracts in diet for nursing mother, 11
Malted gruel, recipe for, 115
Maple molasses gingerbread, recipe for, 156
Marshmallow drops, recipe for, 154
Meal, first morning, may be given from the bottle, 32
Meat in diet of nursing mother, 10
not to be given until child is thirty months old, 40
powder, home-made, method of preparing, 110
stews, method of preparing, 126
spare use of, in hot weather, 56
Meats, boiled, degree of temperature necessary, 126
Menu for fourteen to fifteen months old child, 35
alternating, 35
for nineteen to twenty months old child, 37
alternating, 37
for seventeen to eighteen months old child, 36
alternating, 36

Menu for twelve to thirteen months old child, 32
alternating, 34
for twenty to thirty months old child, 38
sample, for period of second dentition, 48
Menus, breakfast, for child of five or six years, 47
dinner, allowable after thirty months, 40
need of varied, 27
place of cereals in, 27
summer dinner, for children from three to five years, 45
week's, for a child of five years, 41
Sunday, 41
Monday, 42
Tuesday, 42
Wednesday, 43
Thursday, 43
Friday, 44
Saturday, 44
Milk, a source of transmission of infectious diseases, 17
apparatus for heating, 18
Dr. Freeman's, 19
at night in diet of nursing mother, 11
care necessary in preservation of, 16
precautions necessary in the keeping of, 18
pure, requirements for, 16
raw cows', changing to, in weaning, 15
reason for pasteurization of, 17
soup, recipes for, 105, 108
temperature to which it should be heated, 19
Milk-sugar, use of, in early feeding of an infant, 11
Mitchell, Dr. S. Weir, recipe for food for invalids, 112
Moravian cake, recipe for, 123
Morphine, treatment of poisoning by, 79
Mother, convenient daily routine for, 33
nursing, diet for, 10
exercise for, 9
necessity for controlling her temperament, 9
reasons why principles of food-action should be understood by, 3
should supervise preparation of food in illness, 4
Muffins, cornmeal, recipe for, 118
cream, recipe for, 118
Graham, recipe for, 118
Mulled egg, recipe for, 156
Mutton and veal broth, recipe for, 107
tea, recipe for, 107

NIGHT feeding for infants, 12
of children, 34
Nipple, bottle, care of, 20
Nitrate of silver, treatment of poisoning by, 79
Nursery foods, classes of, 50
Nursing, ideal conditions for, 9
intervals for, 11
reasons for not, 10
Nux vomica, treatment of poisoning by, 79

OATMEAL blancmange, recipe for, 117
gruel, recipe for, 113
jelly, recipe for, 117
porridge, recipe for, 116
Oil of vitriol, treatment of poisoning by, 78

Omelet, corn, recipe for, 56
onion, recipe for, 56
Onion, method of cooking, 132
omelet, recipe for, 56
Opium (paregoric), treatment of poisoning by, 79
Orange jelly, recipe for, 152
syrup, recipe for, 155
Oxalic acid, treatment of poisoning by, 78
Oyster broth, recipe for, 109

PARRY, Dr. John S., on prevalence of rachitis, 67
Partridge, method of cooking, 131
Peaches, use of, 146
Peas, method of cooking, 134
Pheasant, method of cooking, 131
Pineapple, use of, 146
Poached egg, method of cooking, 112
Poisoning, rules for cases of, 76
Poisons, antidotes for, 77
antimonial wine, 78
aqua fortis, 78
arsenic, 78
bed bug poison, 78
bicarbonate of potassium, 78
blue vitriol, 78
carbolic acid, 78
carbonate of sodium, 79
caustic potash, 78
caustic soda, 78
chloral hydrate, 78
chloroform, 78
cobalt, 79
copperas, 79
corrosive sublimate, 78
Fowler's solution, 78
hydrochloric acid, 78
laudanum, 79
lead-water, 78
Poisons, antidotes for, morphine, 79
nitrate of silver, 79
nux vomica, 79
oil of vitriol, 78
opium (paregoric), 79
oxalic acid, 78
red precipitate, 78
saltpetre, 78
strychnine (rat and beetle poison), 79
sugar of lead, 78
sulphate of zinc, 78
tartar emetic, 78
vermilion, 78
volatile alkali, 78
white precipitate, 78
Porridge, farina, recipe for, 117
oatmeal, recipe for, 116
wheat, recipe for, 116
Potato soup, recipe for, 109
Potatoes, method of cooking, 139
Proteids, 50
Prune jelly, recipe for, 153
Pudding, bread, recipe for, 158
fruit tapioca, recipe for, 149
rice, with eggs, recipe for, 157
without eggs, recipe for, 157
snow, recipe for, 158

RACHITIS, Dr. Gee on prevalence of, 67
Dr. Parry on prevalence of, 67
Raspberries, use of, 144
Raspberry blancmange, recipe for, 150
Recipes, 100
apple sauce, 136
snow, 151
apple-water, 153

Recipes, arrowroot gruel, 115
barley broth, 106
gruel, 114
barley-water with white of egg, 159
beef broth, 104
essence, 107
juice, 106
tea, 107
blackberry jelly, 147
bread, 119
jelly, 156
pudding, 158
broth, barley, 106
beef, 104
chicken, 105, 108
clam, 109
mutton and veal, 107
oyster, 109
veal, 107
brown Betty, 149
browned flour gruel, 115
cherry jelly, 150
chicken broth, 105, 108
clam broth, 109
clarified apples, 153
corn omelet, 56
cornmeal muffins, 118
mush, 116, 118
cream gruel, 114
muffins, 118
custard, chicken, 108
cup, 161
egg, without milk, 110
savory breakfast, 112
strawberry, 149
dates and cream, 151
egg custard without milk, 110
farina gruel, 114
porridge, 117
fruit sauce, 154
tapioca pudding, 149
Recipes, Graham muffins, 118
grape juice, 147
gruel, arrowroot, 115
barley, 114
browned flour, 115
cream, 114
farina, 114
malted, 115
oatmeal, 113
hominy, 116
Irish moss tea, 153
jellied apples, 151
jelly, blackberry, 147
bread, 156
cherry, 150
oatmeal, 117
orange, 152
prune, 153
rhubarb, 151
sago, 152
savory, 109
junkets, 160
koumyss, 158
lime-water, 155
malted gruel, 115
maple molasses gingerbread, 156
marshmallow drops, 154
meat powder, home-made, 110
stews, 126
milk soup, 105, 108
Moravian cake, 123
muffins, cornmeal, 118
cream, 118
Graham, 118
mulled egg, 156
mutton and veal broth, 107
tea, 107
oatmeal blancmange, 117
gruel, 113
jelly, 117
porridge, 116

Recipes, omelet, corn, 56
onion, 56
onion omelet, 56
orange jelly, 152
syrup, 155
oyster broth, 109
poached eggs, 112
porridge, farina, 117
oatmeal, 116
wheat, 116
potato soup, 109
prune jelly, 153
pudding, bread, 158
fruit tapioca, 149
rice, with eggs, 157
without eggs, 157
snow, 158
raspberry blancmange, 150
rhubarb and orange jam, 150
jam, 152
jelly, 151
mould, 152
rice-water, 155
roast-beef gravy, 110
sago jelly, 152
savory breakfast custard, 112
jelly, 109
sponge cake, 156
strawberry custard, 149
tapioca with chicken or meat jelly, 111
veal broth, 107
Red precipitate, treatment of poisoning by, 78
Rhubarb and orange jam, recipe for, 150
jam, recipe for, 152
jelly, recipe for, 151
mould, recipe for, 152
Rice, method of cooking, 138
milk, recipe for, 155
pudding with eggs, recipe for, 157
Rice pudding, without eggs, recipe for, 157
Rice-water, recipe for, 155
Roast beef, method of cooking, 127
Roast-beef gravy, method of preparing, 110
Rotch, Dr. Thomas M., on diet for nursing mother, 11
on food for children after thirty months, 39
on giving cake and candy to infants, 62
on use of fruit, 144, 146
suggestions for feeding a twelve months old child, 30
table of intervals and amounts in substitute feeding, 23
table of number of feedings, 11

SAGO jelly, recipe for, 152
Salads, use of, 141
Saltpetre, treatment of poisoning by, 78
Sauce, fruit, recipe for, 154
School children, diet for, 79
Dr. W. Gilman Thompson on diet for, 82
diet, a sample, 86
gardens, 98
luncheons, 89
in the Philadelphia Normal School for Girls, 91
Professor Dutton on, 95
Service, dainty, importance of, 54
Sleeplessness, importance of correcting, 58
Smith, Dr. Eustace, on artificial rearing of infants, 3
Snow pudding, recipe for, 158

Soup, milk, recipe for, 105, 108
potato, recipe for, 109
Soups, use of vegetables in, 102
Spencer, Herbert, on preservation of health, 7
Spaghetti, method of preparing, 57, 141
Spinach, method of cooking, 132
Sponge-cake, recipe for, 156
Squabs, method of cooking, 131
Starch food, home-made preparation of, for infants, 15
Starvation, tissue, 6
Stews, meat, method of preparing, 126
Stimulants, harmful in diet of nursing mother, 10
Stomach, infant's, size of, at birth, 25
Strauss, Nathan, 20
Strawberries, use of, 145
Strawberry custard, recipe for, 149
Strychnine (rat paste), treatment of poisoning by, 79
Sugar, amount of, permissible, 62
use of, on cereals, 63
Sugar of lead, treatment of poisoning by, 78
Sulphate of zinc, treatment of poisoning by, 78
Summer breakfasts, 53
suggestions for, for children from three to five years old, 45
desserts, use of, as supplementary foods, 57
diet, 52
suppers, 57, 61
Supper dishes, simple, for summer and winter, 61
Suppers, summer, 57
Sweetbreads, method of cooking, 127

Tapioca, use of, in summer diet, 56
with chicken or meat jelly, recipe for, 111
Tartar emetic, treatment of poisoning by, 78
Tea, beef, recipe for, 107
Irish moss, recipe for, 153
Thompson, Dr. W. Gilman, on diet for school children, 82
on dietetics, 75
on feeble children, 81
on general rules for feeding young children, 29
on method of cooking eggs, 129
Thompson, Sir Henry, on diseases caused by errors in diet, 7
on use of macaroni, 140
Tissue starvation, 6
Tomatoes, method of cooking, 135
Turkey, roasted, part to use, 131
Typhoid fever, diet in, 75

Undigested food, manner in which harm is caused by, 5

Veal broth, recipe for, 107
Vegetables, use of, in soups and broths, 102
use of, in the nursery, 132
Vermicelli, method of cooking, 141
Vermilion, treatment of poisoning by, 78
Volatile alkali, treatment of poisoning by, 78

Walker, Dr. Jane H., on treatment of cases of poisoning, 76

Walker, Dr. Jerome, on "animal-crackers," 122
Waste and repair in children, 1, 2
Water, importance of drinking sufficient, 61
use of, 5, 76
Weaning, changing from prepared milk to raw cows' milk, 15
method of substituting bottle food, 13
proper time for, 13
Weight of infant as an index to nutrition, 12
Wheat porridge, recipe for, 116
White precipitate, treatment of poisoning by, 78
Wine whey, recipe for, 159
Winter breakfasts, combinations for, 47
simple supper dishes for, 61

YALE, Dr., on use of vegetables in soups and broths, 102
Yeo, Dr. I. Burney, on diet for school children, 79

JAN 26 1911

26.B.42.
Children's diet in home and sch1910
Countway Library BET9696
3 2044 046 020 525

26.B.42.
Children's diet in home and sch1910
Countway Library BET9696
3 2044 046 020 525